8b

The Unconscious

How the mind really works, or are we really in control? An introduction by Piya Tan ©2006

"So long as we are not conscious of the unconscious, it will direct our life, and we will call it fate, luck or faith."

1 Conscious, unconscious and involuntary

1.1 NEITHER WILL NOR FREE WILL

1.1.1 More than merely conscious. The study on feelings (SD 17.3) opens with the remark that there is a common notion in western philosophy and popular belief that *our behaviour is not fully determined by our conscious mind*. Buddhism teaches that we are often at the mercy of both forces: while feeling is the active conscious workings of our being, reacting to the world by way of liking, disliking and ignoring the sense-experiences, all such processes are really controlled by our unconscious habits or latent tendencies. Buddhism teaches that if we are no longer attached to our feelings, we will clean up and tame our unconscious, then, we are truly and wholesomely free.

1.1.2 Four key terms. The notion of the unconscious is as ancient as Buddhism itself, which defines it as the latent tendencies (anusaya)² [1.2]. I use the term "unconscious" in this sense, referring to the latent tendencies of lust, aversion and ignorance, which manifest themselves as the 3 unwholesome roots—greed, hate, and delusion—or the preconscious, motivating negative karmic acts through the body, speech and mind [2.2]. The preconscious is so called because we are, in some way, conscious of our motive, but may not be in full control of it. The term subconscious is used to refer to the "existential consciousness," rebirth consciousness or life-continuum (bhav'anga)³ [3]. By conscious is meant the basic activities of the sense-faculties, that is, analyzing and categorizing sense-experiences, at their respective sense-doors, that is, the eye, ear, nose, tongue, body and mind.

1.1.3 Buddhism does not have any notion of "the will" nor of "free will" as found in Western religion and philosophy. A number of western scholars have shown that it was Augustine of Hippo (354-430), a dominant personality of the western Church during his times, who "was, in fact, the inventor of our modern notion of the will" and "the first philosopher of the will." One of the reasons for his invention of the notion of "will" (*voluntas*) was to explain the origin of evil and sin, which Augustine traced back to a primeval "perversion of the will."

<u>1.1.4</u> Modern Buddhist scholars are themselves aware of the absence of "free will" in Buddhism, and that, as such, it is also free from its philosophical problems. **Y Karunaratna**, for example, writes:⁷

¹ Cf "Until you make the unconscious conscious, it will direct your life and you will call it fate" attr to C G Jung, but untraced.

² See Irvin A Hanse, "Buddhist influences on the idea of the Unconscious," 2007. On the early western notions of the unconscious, see L L Whyte 1960, 1967 (summary).

³ See **Viññāṇa**, SD 17.8a (6.1) & *Nīvaraṇa*, SD 32.1 (3.8). For similar (but not identical) usages, see de Silva 1992: 49-51.

⁴ Albrecht Dihle, *The Theory of Will in Classical Antiquity*, University of California, 1982:144, also 123, 127; & Alasdair McIntyre, *Whose Justice? Which Rationality?* Notre Dame, 1988:156 ff. See also foll n.

⁵ Hannah Arendt, *The Life of the Mind* 2: "Willing," NY: Harcourt Brace Jovanovich, 1978:84-110. John Hick says that "St Augustine ... has probably done more than any other writer after St Paul to shape the structure of orthodox Christian belief ... for Augustine's influence was exerted at an earlier and more plastic stage in the growth of the Christian mind ..." (J Hick, *Evil and the Good of Love*, London: Macmillan, 1985:37). See also Hick 1985: 59-69.

⁶ Confessions 7:15.22: The perverted will is "twisted away from you, O God, the highest substance, to lower things." Perversion = per (wrong way) + versus (turning).

⁷ Qu by Keown 1992:216, 218, who also qu Padmasiri de Silva, *Introduction to Buddhist Psychology*, 1979:78.

The expression "freedom of the *will*" or its equivalent is not found in the *suttas* or other authentic texts recording the teachings of the Buddha and its use in modern expositions only reflects an unstated wish to interpret Buddhist thought in terms of the categories of Western thought.

(Karunaratna, Encyclopaedia of Buddhism: cetanā, p91)

1.1.5 As such, we can say that since the Buddha's teaching does not subscribe to the notion of the will (which is a later theistic invention), Buddhism does not subscribe to the notion of "free will," too. This is not because the Buddha does not teach that we have a moral choice in our actions, but simply that both the notion of the "will" and connected idea of "free will" are both later theistic constructions that are narrow, problematic, and casuistic, and as such are rejected by most modern philosophers.

1.2 Unconscious processes and involuntary reactions

<u>1.2.1</u> Neuroscientists have empirical evidence that clearly indicates that only a certain set of neurons in the brain participates in any given moment of consciousness. In fact, many emotional, motor, perceptual and semantic processes occur unconsciously. These unconscious processes are usually limited brain activities in local and specialized brain areas.¹⁰

This result suggests when a stimulus is phenomenally reportable from the standpoint of experience, it is the result of translocal, large-scale mechanisms that somehow integrate local functions and processes. In other words, it has been hypothesized that the neural activity crucial for consciousness most probably involves the transient and continual orchestration of scattered mosaics of functionally specialized brain regions, rather than any single, highly localized brain process or structure.¹¹

(A Lutz, Dunne & Davidson 2007:65)

Early Buddhism similarly <u>does not locate mental processes in a specific area of the body</u>. The Buddhist way of talking about such processes is always a causal and conditional one, that is, by way of dependent arising or a network of interactive causes and effects.

<u>1.2.2</u> As we have seen in our study of consciousness, ¹² our lives as unawakened beings are largely run by our **latent tendencies** (*anusaya*). ¹³ In fact, we *are* our latent tendencies. Even the way we *perceive* (or apperceive) things is through *recognizing*, or giving names and forms to nameless and formless sensedata. ¹⁴ In this sense, we are ruled by our past: very often, our lives are run on an autopilot of habitual tendencies, selective memories and distorted perceptions. We might consider ourselves to be conscious beings, but a huge part of ourselves is ruled by the unconscious mind.

<u>1.2.3</u> *Unconscious* actions are, however, still regarded as morally motivated, but should be understood to differ from *involuntary* actions or reactions. **Sue Hamilton,** for example, discusses the possibility of <u>involuntary reactions</u> and how it is accounted for:

I have suggested that if one is not conscious of a sound then one has not heard it [1996a:88 f]. We can, however, sometimes react "involuntarily" to a sound *without* being conscious of it: in sleep, for example, a loud sound can cause one to make a movement even if there is absolutely no consciousness of the sound at all. We also experience peripheral awareness which we do not seem to be conscious *of*. We regularly avoid obstacles in our path while our attention is wholly elsewhere, for example. Though such experiences of peripheral awareness might indicate the minimal level to which consciousness of, or awareness, operates, this question is not explicitly dealt with in the Sutta Piṭaka. Nor is the experience of involuntary reactions explained. This is a significant omis-

⁸ See eg **Atta,kārī S** (A 6.38/3:337 f), SD 7.6.

⁹ See **Free will and Buddhism**, SD 7.7 (6-7).

¹⁰ Dehaene & Naccache 2001.

¹¹ Llinas, Ribary, Contreras & Pedroarena, 1998; Tononi & Edelman 1998; Singer 2001; Dehaene & Nacchache 2001.

¹² **Viññāna**, SD 17.8a(5.1).

¹³ See (**Dve**) **Khandha S** (S 22.48), SD 17.1a (1.2) & *Anusaya*, SD 31.3.

¹⁴ See *Saññā*, SD 17.3, esp §2.

sion because involuntary reactions such as wet dreams became the subject of controversy in the early Buddhist *sangha*: if they are unconscious, do they constitute a volition with moral implications?¹⁵ (1996a:90)

- <u>1.2.4</u> The early Buddhist view is that, in an ordinary person, <u>a conscious action</u>—whether a physical act, speech, or thought—is rooted in one of the 3 unwholesome roots (greed, hate or delusion) or one of the 3 wholesome roots (charity, lovingkindness or wisdom). An <u>unconscious action</u>, on the other hand, is an action done without much awareness or mindfulness, especially a physically habitual act, such as breathing or walking or certain mannerisms. Such actions are generally morally neutral.
- 1.2.5 However, most of our actions, even though they are unconscious or habitual, can be immoral or unwholesome. For example, a butcher, while slaughtering an animal, may rationalize that he is earning a living to support his family,or might even offer a special prayer (asking for forgiveness, etc). He might even be convinced that he has no ill intentions at all in slaughtering animals. In fact, the butcher may have been slaughtering animals with such frequency that he often does so "without a thought," as it were. The action is still immoral.¹⁸
- 1.2.6 We also have the case of some pre-literate tribesmen (such as the Kalahari !Kung or Zhun/twasi) who perform certain rituals before the carcass of an animal they have killed, "asking for forgiveness" for having killed it and "thanking" it for offering its meat. In karmic terms, such acts may be less immoral than, say, a big game hunter who kills for sport; but both acts are karmically immoral, even if it is a matter of degree.
- 1.2.7 An important point to remember is that <u>an unconscious act is done unmindfully</u>: it is a routine of simply going through the motion; we go on autopilot, as it were. We could, for example, make a routine of performing prayers and rituals, but our lives remain untouched and unmoved by goodness in any way. In religion, we often see such unconscious religious lifestyles when we surrenders our mind to a guru-figure or a God-figure, that is, when we place our locus of control outside of ourselves: we have handed our life's remote control to another.¹⁹
- <u>1.2.8</u> One of the most pernicious effects of the belief in an almighty God (that is, the God of one's choice) coupled with the notion that "man proposes, God disposes," is that such a zealot simply feels he is not responsible for his bad deeds. This probably explains why religious wars and crusades have been going on throughout history by way of remorseless, even glorified, acts of mass murder, massacre, terrorism, destruction, exploitation and manipulation.

The perpetrators simply do not feel that they are doing anything wrong: they are not only *unconscious* about the bad deeds, but they are actually *deluded* in thinking that they are actually right and good in doing so! This is the dark power of the misuse and misunderstanding religion.

1.3 Unconscious perception

<u>1.3.1</u> Although there is no scientific evidence that commercial self-help subliminal tapes actually work, some experiments have shown that we can be unconsciously effected by certain events. Scientists have found a long-lasting and somewhat unnerving effect in a controversial study of people undergoing general anaesthesia. During a real surgical operation involving ten patients, a mock crisis was staged,

¹⁵ See LS Cousins, 1991. (Hamilton's fn). Arhats do not have wet dreams (V 1:294; Kvu 2.1.21/172).

¹⁶ See eg **Sāleyyaka S** (M 41/1:285-290), SD 5.7; **Cūļa Kamma,vibhaṅga S** (M 135/3:202-206), SD 4.15; **Iṭṭha S** (A 5.43/3:47-49); **Kusalâkusala Sañcetanika S** (A 10.206/5:292-297), SD 3.9

¹⁷ A famous case is that of the twisted hand of Nigrodha,kappa (Vangīsa's teacher): see **Anabhirati S** (S 8.2/1:186 f; SA 1:169 f); ThaA 3:198; SnA 346; see also SD 16.12 (1.3).

¹⁸ One must note that "butcher" is simply a word: there are occasions when the butcher might not kill (say, during holy days) or when he visits a temple and listens to a Dharma talk, which actions are of course wholesome. Karma is what one *does* (by way of the mind, the body or speech) and *is* (this is rooted in either greed, hate, or delusion). It is not an occupation or a social class. Of course, we *become* our karma: we *are* our karma, once it fruits: see **Samsappanīya Pariyāya S** (A 10.205/5:288-291), SD 39.7.

¹⁹ See *Saṅkhāra*, SD 17.6(2.2).

²⁰ See eg P M Merikle, "Subliminal perception." In A E Kazdin (ed), *Encyclopedia of Psychology*. NY: Oxford University Press, 2000 7:497-499.

where a statement was made to the effect that the patient was going blue and needed more oxygen. A month later, they were hypnotized and asked whether they remembered anything that had occurred during their operation. Four of them remembered the statement verbatim, and four more recalled something of what was being said.²¹

<u>1.3.2</u> In another interesting experiment, subjects (who knew no Chinese) had to rate a series of Chinese characters according to whether they thought each represented a "good" or a "bad" concept. One group of subjects saw either a smiling face or a scowling face for one second before each one. They were told to ignore these faces and concentrate only on rating the characters.

The second group was shown the same faces for only 4 milliseconds, which is not long enough to actually see them. The interesting result was that the first group managed to ignore the faces as instructed, but the second group were somehow influenced by the faces they claimed not to see. If the invisible face was smiling, they were more likely to rate the character as "good."²²

1.3.3 Brain scans have also shown that <u>unconscious perception can affect the brain</u>. An fMRI²³ study showed that subjects who unconsciously perceived *fearful* faces had increased activity in <u>the amygdala</u>²⁴ than did those who saw *happy* faces.²⁵ And a PET²⁶ study showed that angry faces activated the right amygdala, but not the left one.²⁷ Such studies confirm that even when information is not consciously perceived it can have effects in the same parts of the brain that would be activated by consciously seen stimuli of the same kind.²⁸

<u>1.3.4</u> Scientists have also observed that when the brain was activated by unconscious primes, ²⁹ there was activity not only in sensory areas, but also in motor areas, suggesting covert responses to the unseen masked stimuli. They concluded that "[a] stream of perceptual, semantic, and motor processes can therefore occur without awareness." This, notes psychology specialist, Susan Blackmore (2003:278), is remi-

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²¹ B W Levinson, "States of awareness during general anaesthesia." *British Journal of Anaesthesia* 37, 1965: 544-546; see also J F Kihlstrom, "Perception without awareness of what is perceived, learning without awareness of what is learned." In M Velmans (ed), *The Science of Consciousness*, London: Routledge, 1996:23-46, & P M Merikle & M Daneman, "Memory for unconsciously perceived events: evidence from anesthesized patients." *Consciousness and Cognition* 5, 1996:525-541.

²² S T Murphy & R B Zajonc, "Affect, cognition, and awareness: affective priming with optimal and suboptimal stimulus exposures." *Journal of Personality and Social Psychology* 64, 1993:723-739.

²³ fMRI = functional magnetic resonance imaging, which is the use of MRI to measure the hemodynamic response (ie blood flow) related to neural activity in the brain or spinal cord of humans or other animals. It is one of the most recently developed forms of neuroimaging.

²⁴ **The amygdala**, also called "amygdaloid nucleus," is an almond-shaped mass of grey matter in the anterior portion of the temporal lobe (ie the limbic system, which plays an important role in motivation and emotional behaviour). It is activated in stressful situations to trigger the emotion of fear. Hallucinations related to post-traumatic stress are thought to be caused by the activation of memory traces in the amygdala that have not been integrated and modified by other parts of the brain. See also SD 17.8c (7.3).

²⁵ P J Whalen et al, "Masked presentation of emotional facial expressions modulate amygdala activity without explicit knowledge." *Journal of Neuroscience* 18, 1998:411-418.

²⁶ PET = positron emission tomography, ie, tomography in which a computer-generated image of a biological activity within the body is produced through the detection of gamma rays that are emitted when introduced radio-nuclides decay and release positrons. A medical imaging technique that monitors metabolic, or biochemical, activity in the brain and other organs by tracking the movement and concentration of a radioactive tracer injected into the bloodstream.

²⁷ J S Morris, A Öhman & RJ Dolan, "Consciousness and unconscious emotional learning in the human amygdala." Nature 393, 1998:467-470.

²⁸ On the other hand, scientists had also observed during research on meditating Tibetan Buddhist monks that <u>the left prefrontal cortex</u> (associated with happiness, zest, and alertness) showed a high level of activity. See **Consciousness and meditation**, SD 17.8c(7.3).

²⁹ In physiology and psychology, a **prime** refers to the triggering of specific memories or perception by a particular cue, eg one can "prime" the recall of such diverse memories as "fire engine" and "apple" with the word "red." Dehaene et al, "Imaging unconscious semantic priming." *Nature* 395, 1998:597.

niscent of William James' contention that "Every impression which impinges on the incoming nerves produces some discharge down the outgoing ones, whether we be aware of it or not" (1890 2:372).

- **1.4 IMPLICATIONS OF UNCONSCIOUS PERCEPTION. Susan Blackmore,** in her instructive study, *Consciousness: An introduction* (2003:279 f) discussing the implications of unconscious perception, states that "The evidence for unconscious perception shows that some popular ideas about consciousness have to be wrong." Here I summarize the conclusions regarding the three ways of thinking about consciousness, adding my own comments by way of explication.
- (1) <u>The Cartesian theatre theory</u>. This traditional view stems from the French philosopher, René Descartes, ³¹ from whom came the theory of the "Cartesian theatre." According to this view, *consciousness is like a multi-sensory cinema, whereupon "I" can experience and act on it.* At its most extreme, this theory assumes that perception is always conscious, and that sensory information can only lead to action once it has passed through the theatre of consciousness. As we have seen, there are many good reasons for rejecting this view: there is unconscious perception (which is, in fact, a major part of our consciousness) and there is also subliminal perception.³³
- (2) <u>Cartesian materialism</u>. The second view accepts these reasons, but still fails to reject the theatre theory: sensory information enters the consciousness and is acted upon consciously, *while some bypass consciousness and is acted on unconsciously*, perhaps by using routes through the brain that lead to motor output without actually reaching consciousness. While rejecting the notions of a homunculus ("little man") watching events on a mental screen, it retains essential idea that things are either "in" or "out" of consciousness. This is perhaps the most common academic view in consciousness studies today.
- (3) <u>Subjective statements</u>. The third view is basically *what people often say about their own experience*. However, there is no undisputed measure for deciding whether something has been consciously perceived or not, and there are many stimuli that are deemed to be consciously perceived by some measures and not by others. So we cannot really say for sure whether an experience is "in" or "out" of consciousness.

Sensory information is processed in many different ways, interpreted in different ways, bringing differing results for different kinds of behaviour. Some such behaviours may be taken as indication of consciousness, such as verbal response or choices between clearly perceptible stimuli, while others are usually considered to be unconscious, such as fast reflexes, or certain measures of brain activity. In between, there are many kinds of behaviour that are sometimes taken to indicate consciousness, and sometimes not.

The main problem for this third theory is what people say about their own experience, that they are sure what is and is not in their consciousness, even if they cannot always explain what they mean. One

On subliminal perception, see Blackmore 2003:273-279, 283.

³¹ **René Descartes** (1596-1650) is one of the most important Western philosophers of the past few centuries. During his lifetime, Descartes was just as famous as an original physicist, physiologist and mathematician. He has been called the father of modern Western philosophy because (1) he was one of the first to abandon scholastic Aristotelianism, (2) he formulated the first modern version of **mind-body dualism**, from which stems the mind-body problem, and (3) he promoted the development of a **new science** grounded in observation and experiment. Applying an original system of methodical doubt, he dismissed apparent knowledge derived from authority, the senses, and reason and erected new epistemic foundations on the basis of the intuition that, when he is thinking, he exists; this he expressed in the dictum "I think, therefore I am" (best known in its Latin formulation, "**Cogito, ergo sum**," though originally written in French, "Je pense, done je suis"). See **Self & Selves**, SD 26.9 (3.2).

³² The **Cartesian theatre** is a somewhat disparaging term coined by philosopher Daniel Dennett (b 1942) to pointedly refer to the defining aspect of Cartesian materialism, which he considers to be the often unacknowledged remnants of Cartesian dualism in modern materialistic theories of the mind. See his *Consciousness Explained*, 1991: 107. See D Dennett & M Kinsbourne, "Time and the observer," http://ase.tufts.edu/cogstud/papers/time&obs.htm; also Antonio Damasio, *Descartes' Error: Emotion, reason, and the human brain*, Avon Books, 1994 and also: http://serendip.brynmawr.edu/bb/damasio/descartes.html.

response is to try to explain how the illusion comes about.³⁴ Another is to show how these misguided intuitions disappear with proper introspection.³⁵

2 Consciousness is non-self

2.1 THE "DOER" IS NON-SELF

2.1.1 Most of us go through life thinking we have full control of things around us; some politicians go further and think that they are in control of everything. This is one reason why religion—or, more specifically, the spiritual aspects of religion—stand out at the opposite end of such a scale of things. The delusion that "I'm in charge" is a major hindrance to meditation and mindfulness practice. The notion that everything, or at least the things around us, should run according to our wishes, often creates restlessness, worry and fear.

2.1.2 Restlessness arises when we feel strongly compelled to *do* things or get things *done*, and in the way we *want* it. Worry is the dwelling on past pains, failures and perceptions, or dreaming of future pleasure and success. Fear is the dark side of desire: when we have a strong desire for something, the fear of not attaining it, or of not enjoying it, is always lurking close by. All these negative emotions thrive, driven by the notion that is there is a permanent self that is "in charge."

2.1.3 The way out of this "doing" cycle is to understand that the "**doer**" cannot let go of doing: the doer simply keeps on doing, and cannot help itself. It takes some wisdom to see that the doing is merely a conditioned reflex. A reflection may help here.

The next time you relax beside a lake, notice how ripples form on the water surface. A single leaf, flower, or object drops on the water, and ripples appear in waves moving outwards. Look closely and you see with your mind's eye that the water is not moving *outwards*: it is only the kinetic energy pushing the water *upwards* each time. The waves appear to move towards you: moving, yet not moving. What we perceive as "waves" are merely water pushed up and down in a patterned way.³⁶

2.1.4 Our minds work in the same way: we form ideas and emotions and take them to be real, and act or react accordingly. A simple way of exposing the falseness of such "doings" is to recall some childhood difficulties (such as fear, anger, etc) we have gone through. Most likely, we would think that we know better now and would have responded differently with that wisdom. The same reasoning should then be applied to our present condition: "What would I do if I were wiser now?" We may be growing older but the child is still in us, and this child—our "doing" mind—has to grow, too. Let us now examine how we can tame and free the doer.

2.2 THE "KNOWER" IS NON-SELF

2.2.1 Being present. Powerful as the "knower" or preconscious mind³⁷ may be, there is yet another side to our mind, a sort of silent (sometimes, sleeping) partner, that is, the "doer," whose roots lie very much deeper than those of the knower, but *they always go together in the unawakened mind*. You can use deep meditation to stop the doer for a while (such as keeping to the precepts), or even a long while (such a being reborn in a dhyanic realm and spending aeons there). However, even those states are impermanent, and they go in an unending cycle called *samsara*.

The "knower" reacts to what it knows, and this knowing leads to doing. This knower is technically known as the mind (citta), that is, the basic activity of the senses. In a "normal" person, who has little understanding or control of his mind, the knower is strongly influenced and directed by the doer, the unconscious mind. Because of the constant, but usually unnoticeable, presence of the doer, we have a sense of a "permanent presence" of an abiding self, a sort of self-identity. This is the root of any notion of an abiding self or eternal soul.

³⁴ D Dennett 1991.

³⁵ Blackmore 2003:401-414 (ch 27): "Buddhism and consciousness."

³⁶ I thank Dr Thomas ANG Yong Long for his comment here from a physics viewpoint. See **Self & selves**, SD 26.9 (2.5.2) Reflection.

³⁷ See SD SD 7.10 (3.3).

2.2.2 Consciousness is the knower. Very often, people today still make the "Cartesian error" of thinking that since one thing is sure—"I exist"—therefore, it must be a permanent self, an abiding entity. They think there is *something* there that knows, ³⁸ or as **Brahmavamso** puts it:

"The knower" is usually called consciousness or *citta* (mind), which is what knows. That knowing is often seen to be the ultimate "self." Very often people can get the perception, or the paradigm, in their minds of perceiving something in here, which can just know and not be touched by what it knows. It just knows heat and cold, joy and pain. It just knows beauty and ugliness. However, at the same time (somehow or other), it can just stand back and not be known, and not be touched by what's actually happening. It is important to understand that the nature of consciousness is so fast, so quick, that it gives the illusion of continuity. Owing to this illusion, one misses the point that whatever one sees with your eyes, or feels with the body, the mind then takes that up as its own object, and it knows that it saw. It knows that it felt. It's that knowing that it saw, knowing that it felt, that gives the illusion of objectivity. It can even know that it knew.

When philosophy books talk about "self reflection" or "self knowledge", the fact that not only do "I know", but that "I know that I know", or that "I know that I know that I know", is given as a proof of the existence of a self. I have looked into that experience, in order to see what actually was going on with this "knowing" business. Using the depth of my meditation, with the precision that that gave to mindfulness, to awareness, I could see the way this mind was actually working. What one actually sees is this procession of events, that which we call "knowing." It's like a procession, just one thing arising after the other in time. When I saw something, then a fraction of a moment afterwards I knew that I saw, and then a fraction of a moment afterwards I knew that I knew that I know that I know." The truth of the matter is, "I know that I knew that I knew." When one adds the perspective of time, one can see the causal sequence of moments of consciousness. Not seeing that causal sequence can very easily give rise to the illusion of a continuous "knower." This illusion of a continuous "knower" is most often where people assume that their "self" resides.

However, as it says in the suttas, one can see that even knowing is conditioned (*sankhata*) (M 64).³⁹ One can see that this too rises because of causes, and then ceases when the causes cease. This is actually where one starts to see through the illusion of objectivity. It is impossible to separate the "knower" from the known. As the Buddha said many times, "In all of the six senses, such as the mind base, when mind base and mind objects come together it turns on mind consciousness. The coming together of the three is called *phassa* (contact)" (eg M 28).⁴⁰ Consciousness is conditioned, it has its causes, and it's not always going to be there. During the experience of jhana one is totally separated from the world of the five senses. All five senses have disappeared. All that's left is mind, mind base, mind experience. One then knows clearly what mind (*citta*) is. (Brahmavamso 2001:4, digital ed)

³⁸ **Paul Williams**, specialist in Mahayana of 30 years, in *The Unexpected Way: On converting from Buddhism to Catholicism* (2002:34 f), explains his conversion as being related to the question "why there is something rather than nothing." He claims that Buddhism is unable to answer why *does* the contingent universe exist at all. He concluded that only a *necessary* being—which Buddhism rejects—could serve as an adequate explanation to that question, such as God as conceived by Thomas Aquinas. This is commonly, but misleadingly, called the "anthropic principle," but really falls under the *contingency* argument (that the universe depends for its explanation on something outside of itself): see John Hospers, *An Introduction to Philosophical Analysis*, 2nd ed 1967:436-443. What is curious is that informed Buddhists would reply what does "something" mean, and reflect on the *anattā* characteristic. Perhaps, Williams does not find the *Mahayana* explanation of this unconvincing. Throughout his work, he is evidently shows little, if any, emphasis on early Buddhism. See V J Stenger, *God, the Failed Hypothesis, How science shows that God does not exist*, NY, 2007:47-75 (ch 2). For a digest of various contemporary specialists' views, see http://scienceandreligiontoday.blogspot.com/2009/06/why-is-there-something-rather-than.html.

³⁹ Mahā Māluṅkya,putta S (M 64), SD 21.20.

⁴⁰ Mahā Hatthi,padopama S (M 28), SD 6.16.

2.2.3 The "as if" approach

2.2.3.1 As the English neuropsychiatrist, **P Fenwick**, puts it very succinctly, "The characteristic of enlightenment is a permanent freeing of the individual from the illusion that he is 'doing'." Susan **Blackmore** provides contemporary insight into this:

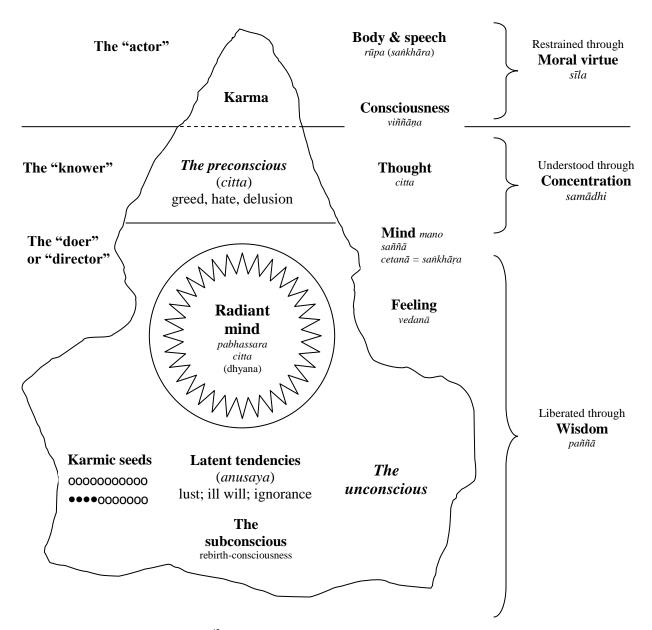


Fig 2.2.3 The Iceberg diagram⁴²

We are made up of body and mind. On a **conscious** *public level*, only our physical and verbal acts can be seen. Such acts are often consciously motivated by greed, hate and delusion: they are <u>intentional acts</u>

⁴¹ P Fenwick, "Meditation and the EEG." In M West (ed), *The Psychology of Meditation*. Oxford: Clarendon Press, 1987:117. See also S Blackmore 2003:413 f.

⁴² On citta, mano and viññāṇa, see SD 17.8a (12).

($cetan\bar{a}$). On a **conscious** *private level*, the mind is constantly <u>perceiving</u> things ($sa\tilde{n}\tilde{n}\tilde{a}$), and we judge them as pleasant, unpleasant and neutral according to our <u>feelings</u> ($vedan\bar{a}$). Such reactions arouse craving (in the form of like and dislike based on delusion), <u>forming ideas</u> ($sankh\bar{a}ra$) about them. Such unwholesome acts go on to form <u>habits</u> ($n\bar{a}ti$) and sink as "karmic seeds" deep into our **unconscious** as <u>latent tendencies</u> (anusaya), ready to spring into action when the conditions are right and directing our actions and life.

On the *social level*, our physical acts and speech can be moderated and purified through <u>moral virtue</u> ($s\bar{\imath}la$). However, the negative **thoughts** behind such acts and speech need to be restrained and purified through <u>mental concentration</u> ($sam\bar{a}dhi$) or <u>mindfulness</u> (sati). Our physical acts, speech and and thoughts can only be consistently wholesome and pure when we have attained <u>insight wisdom</u> ($pa\tilde{n}\tilde{n}a$) or awakening (bodhi), that is, reached the state of an arhat (arahatta).

How is it possible to live without doing? One answer lies in the simple phrase "as if." You can live *as if* you have free will; *as if* you are a self who acts; *as if* there is a physical world outside yourself. You can treat others *as if* they are sentient beings who have desires, beliefs, hopes and fears—adopting the intentional stance towards others, and towards yourself. This way of living drops any distinction between real and *as if* intentionality, or real and *as if* free will. (2003:413 f)

2.2.3.2 This *as if* approach means, I think, that we have some level of understanding that the real world is not what it appears to be, but since that is the way most people view it, we respect and respond to that virtual world in a way that would not mentally or spiritually jeopardize ourselves in anyway, and at the same time we will be able to healthily relate to others. It is like playing "Let's pretend" but being serious and compassionate about it. This is the "actor," the mask or persona that we show the world, and by which others identify us.

2.2.3.3 As such, the "actor" is our public face, influenced or controlled by the preconscious knower, which is in turn strongly coloured and directed by the unconscious doer. The three can be seen as the parts of a huge iceberg: the more or less 10% of it that is seen *above* the water is the "actor" (our actions and words), and *below* this, hidden just under the water-level is the knower (our preconscious mind). Then, there is a massive behemoth, the powerful doer, or latent tendencies, our past karma, forming the bulk of the iceberg deep down in the waters of our life. Both the knower and doer, the preconscious and the unconscious, form about 90% of the mind's iceberg. [Fig 2.2.3]

3 The two kinds of consciousness

3.1 Types of consciousnesses

3.1.1 In our study of $vi\tilde{n}\tilde{n}\bar{a}na$, we have looked at the two types of consciousnesses: cognitive consciousness and existential consciousness, and we also see, in **the Mahā,nidāna Sutta** (D 15) and **the Nagara Sutta** (S 12.65), how consciousness interact with $n\bar{a}ma,r\bar{u}pa$, in a loop: it begins with $vi\tilde{n}\tilde{n}ana$, but states that $vi\tilde{n}\tilde{n}ana$ and $n\bar{a}ma,r\bar{u}pa$, as the second link in the formula, are mutually conditioning.

We can in fact apply this looped sequence to see how both types of consciousness interact. We saw that in the link, "With name-and-form as condition, there is consciousness" ($n\bar{a}ma,r\bar{u}pa,paccay\bar{a}$ $vi\bar{n}$ - $n\bar{a}nam$), $vi\bar{n}\bar{n}\bar{a}na$ refers to existential consciousness, and in the link, "With consciousness as condition, there is name-and-form" ($vi\bar{n}\bar{n}\bar{a}na,paccay\bar{a}$ $n\bar{a}ma,r\bar{u}pam$), it is cognitive consciousness. ⁴⁷ This distinction is useful in explaining the functions of $vi\bar{n}\bar{n}\bar{a}na$, but as **W S Waldron** cautions,

⁴³ SD 17.8a (6).

⁴⁴ Amongst the scholars who have used this distinction are O H de A Wijesekera 1964, Rune E A Johansson 1965: 198 f, & W W Waldon 2003: 41-45. I regard this as the *subconscious*: see definitions [1.1]. See **Nagara S** (S 12.65), SD 14.2 (2) & *Viññāna*, SD 17.8a(6).

⁴⁵ D 15.3/2:56 = SD 5.17 & S 12.65.9.3/2:105, 12.65.17ab/2:105), SD 14.2 respectively.

⁴⁶ SD 17.8a (6).

⁴⁷ See *Viññāṇa*, SD 17.8a (6) esp Fig 6.1.

We draw these conclusions ["they are, in this temporal sense, causal conditions of one another"], however, only through inference and analysis, since there are no extant passages in the early Buddhist texts that explicitly differentiate these two, nor relate them in this fashion.

(2003:41)

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Waldron adds, "This is not to say that this distinction can be or need be discerned in all occurrences of the term. The point is that these two divergent contexts of meaning form part of a complex, with all its inherent tensions, whose unity as well as differentiation calls for some sort of explication." (Waldron's footnote). Waldron is using this distinction to understand the background and context of the Yogâcāra concept of the *ālaya,vijñāna*—"to be able to delineate two *regularly occurring and consistently distinct contexts* in which these 'aspects' of *viññāṇa* appear in the material which later thinkers [including the Abhidharma traditions] drew upon in formulating their own innovative theories of mind." (Waldron 2003:41-45)

- 3.1.2 This lack of differentiation is not only understandable in early Buddhism, but it is its strength, that is, in focusing on experiential truths rather than theoretical accuracies that characterizes the Abhidhamma and later philosophical traditions. The Abhidharma texts, for example, shifted the focus "from the more general processes that govern progress along the Buddhist path to the events that constitute those processes," **Gethin** explains "might be viewed as an attempt to provide a more detailed and accurate map of the path" (2005:194). As it is famously said, the map is not the territory. This is especially true in the case of early Buddhism which has a strong critique of language (as compared to, say, the Abhidhamma penchant for naming the world and creating absolute units and ultimate categories).
- **3.2 R E A Johansson**, a pioneer in Buddhist psychology, has noted a number of Sutta passages where $vi\tilde{n}\tilde{n}ana$ "is found twice in the same context, and it may be difficult to decide, whether the same meaning is intended or not" (1965:198), but, as we shall see, he drops clear hints of an understanding of a distinction between the two types of consciousnesses. Let us examine the two passages that he has cited.

Johansson first quotes from **the Anātha,piṇḍik'ovāda Sutta** (M 143), from Sāriputta's final instructions to the dying Anātha,piṇḍika. Sāriputta admonishes Anātha,piṇḍika to let go of anything that could serve as a support for *viññāṇa* to be bring about rebirth, that is, within which *viññāṇa* occurs <u>as cognitive consciousness</u>, thus:

- 5 "Then, houselord, you should train yourself thus:
- 'I will not cling to the eye, \langle the ear, | the nose, | the tongue, | the body, | the mind \rangle and my $vi\tilde{n}\tilde{n}\bar{a}na$ will not be dependent on the eye \langle the ear, | the nose, | the tongue, | the body, | the mind \rangle .
- 6 ...I will not cling to <u>sights</u>, \langle sounds, | smells, | tastes, | touches, | mind-objects \rangle and my $vi\tilde{n}\tilde{n}\bar{a}na$ will not be dependent on <u>sights</u> \langle sounds, | smells, | tastes, | touches, | mind-objects \rangle .
- 7 ...I will not cling to <u>eye-consciousness</u>, \langle ear-consciousness, | nose-consciousness, | tongue-consciousness, | body-consciousness, mind-consciousness \rangle and my $vi\tilde{n}\tilde{n}ana$ will not be dependent on <u>eye-consciousness</u> \langle ear-consciousness, | nose-consciousness, | tongue-consciousness, | body-consciousness, | mind-consciousness \rangle .
- **8** ...I will not cling to <u>eye-contact</u>, ⟨ear-contact, | nose-contact, | tongue-contact, | body-contact, | mind-contact⟩ and my *viññāṇa* will not be dependent on <u>eye-contact</u> ⟨ear-contact | nose-contact | tongue-contact | body-contact | mind-contact⟩.
- **9** ...I will not cling to <u>feeling born of eye-contact</u>, (of ear-contact, | of nose-contact, | of tongue-contact, | of body-contact, | of mind-contact) and my *viññāṇa* will not be dependent on <u>feeling born of eye-contact</u> (of ear-contact | of nose-contact | of tongue-contact | of body-contact | of mind-contact).
- 10 ...I will not cling to the earth element, \langle to the water element, | to the fire element, | to the wind element, | to the consciousness element, \rangle and my $vi\tilde{n}\tilde{n}ana$ will not be dependent on the earth

⁴⁸ On the origin on the Abhidhamma, see **Dhamma and Abhidhamma**, SD 26.1.

⁴⁹ See *Saññā*, SD 17.4(3-6) & also Ronkin 2005:246.

<u>element</u> \langle to the water element | to the fire element | to the wind element | to the consciousness element \rangle .

11 ...I will not cling to <u>form</u>, I will not cling to <u>feeling</u>, I will not cling to <u>perception</u>, I will not cling to <u>formations</u>, I will not cling to <u>viññāna</u>,

and my *viññāṇa* will not be dependent on <u>form</u>. and my *viññāṇa* will not be dependent on <u>feeling</u>. and my *viññāṇa* will not be dependent on <u>perception</u>. and my *viññāṇa* will not be dependent on <u>formations</u>. and my *viññāṇa* will not be dependent on <u>viññāṇa</u>.⁵⁰

(M 143,5-10/3:259 f; abridged), SD 23.9

Johansson cites the last line and adds that:

...there is a form of viññāna dependent on cognitive processes, and probably viññāna in its rebirth-aspect is intended, as the context deals with meditation. As the factors mentioned are mostly perceptions and ideas without much mystery about them, rebirth-viñn̄āna probably also simply is ordinary viñn̄āna. It would be strange, eg, that a metaphysical viñn̄āna could arise from the cognitive viñn̄āna: they must both consist of similar conscious processes.

(1965:199; emphasis added)

Johansson correctly identifies the second *viññāṇa* as the "rebirth-*viññāṇa*," or what is here called existential consciousness. His second quotation is from **the Upāva Sutta** (\$22.53):⁵¹

If, bhikshus, a monk has abandoned lust for (the form element..., the feeling element,...the perception element...for the formations element) **the consciousness element**, with the abandoning of lust, *the basis is cut off*. There is no establishing of consciousness.

And when that **consciousness** is unestablished, not growing, *non-generative*, it is liberated... (S 22.53/3:53 f), SD 29.4

3.3 Here the Samyutta Commentary explains "**the basis is cut off**" (*vocchijjat 'ārammaṇaṃ*) as meaning that the basis (*ārammaṇa*) is cut off through the lack of any ability to bring about rebirth (SA 2:272). The Ṭīkā adds that *the basis is the condition for rebirth by way of the karmic sign*, etc, is "cut off" by way of the cutting off of karma that produces rebirth (SAT:VRI 2:198).

Bodhi notes that

SAṬ [the Porāṇa Ṭīkā] thus takes *ārammaṇa* here in the sense dominant in the Abhidhamma, ie, as the object of rebirth-consciousness [see Abhs:BRS 3.17]. However, I understand the word in the older sense of "basis," elsewhere glossed simply as *paccaya*; [see S:B 759 n112]. SA's explanation need not entail the interpretation proposed by SAṬ. (S:B 1060 n71; refs normalized)

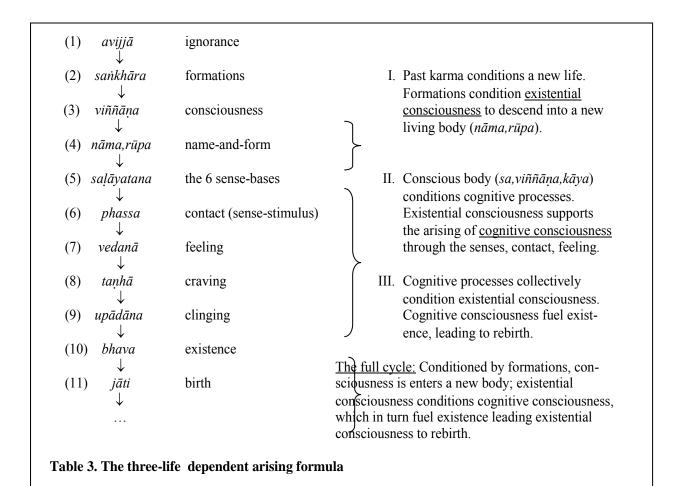
Here **the consciousness element** ($vi\tilde{n}\tilde{n}\bar{a}na,dh\bar{a}tu$) refers to the consciousness aggregate ($vi\tilde{n}\tilde{n}\bar{a}na-k,-khandha$), that is, <u>cognitive consciousness</u>. This is one of the rare occasions in the suttas where $dh\bar{a}tu$ is used as a synonym for khandha. The non-generative consciousness ($an\bar{a}bhisankh\bar{a}ra\ vi\tilde{n}\tilde{n}\bar{a}na$) refers to what becomes of existential consciousness.

The term <u>non-generative</u> (anābhisankhāra) means that the consciousness does not generate formations (that is, the formations do not grow) (sankhāra), in the sense, says the Commentary, that it is "liberated," that is, it does not generate rebirth (SA 2:272). The Sutta closes by declaring that such a person has attained nirvana.

⁵⁰ Na viññānam upādavissāmi, na ca me viññāna,nissitam viññānam bhavissati.

⁵¹ ⟨Rūpa,dhātuyā ... vedanāya,dhātuya ... saññāya,dhātuya ... saṅkhāra,dhātuya ...⟩ ce bhikkhave bhikkhuno rāgo pahīno hoti, rāgassa pahāna vocchijjat ʾārammaṇam patiṭṭhā viññāṇassa na hoti. Tad apatiṭṭhitaṁ viññāṇam avirūlhaṁ anabhisaṅkhārañ ca vimuttaṁ ...

⁵² In fact, this usage is only found in **Hāliddakāni S 1** (S 22.3/3:10), SD 10.12, **Hāliddakāni S 2** (S 22.4/3:13), **Upāya S** (S 22.53/3:53), **Bīja S** (S 22.54/3:55) and **Udāna S** (S 22.55/3:58), all found in **the Khandha Saṁyutta**.



3.4 CONSCIOUSNESS, AWAKENED AND UNAWAKENED

<u>3.4.1</u> This teaching becomes clearer if we examine **the Atthi,rāga Sutta** (S 12.64), where the Buddha describes <u>the nature of the arhat's consciousness</u>. Using the analogy of a shadow not forming in empty space, the arhat's consciousness similarly does not settle or is not established anywhere.

So, too, bhikshus, if there is no lust for edible food...for the food that is contact...for the food that is mental volition...for the food that is consciousness...consciousness is not established there and grow.

Where consciousness is not established and does not grow,...I say that it is without sorrow, without anguish, without despair. (S 12.64/2:101-104), SD 26.20

3.4.2 Bodhi, in a long footnote, instructively says:

It should be noted that [the Samyutta Commentary] explains that statement that the arahant's *consciousness* is unestablished to mean that his kamma in unestablished. This seems too free an interpretation. Nevertheless, I think it would be wrong to interpret the sutta as saying that after his parinibbāna the arhant's consciousness persists in some mode that can only be described as unestablished. The present passage is clearly speaking of the arahant's consciousness *while he is alive*. Its purport is not that an "unestablished consciousness" remains after the arahant's parinibbāna, but that his consciousness, being devoid of lust, does not "become established in" the four nutriments in any way that might generate a future existence. (S:B 775 n174)

3.4.3 In the unawakened, however, the two consciousnesses continue operating by mutually reinforcing one another through dependent arising [Table 3]. In the presence of form, that is, the sense-faculties, consciousness gives rise to feeling, from which follows craving, clinging and the formations that create and feed the existential (or samsaric) consciousness. As long as this happens, the rebirth cycle will continue, at the heart of which is the stream of consciousness itself.

The monk **Nāgasena** summarizes this vital point in his exposition on dependent arising to Milinda (Greek king Menander),⁵³ in the famous episode:

Then the elder (Nāgasena), having drawn a circle (*cakka*) on the ground, said this to the king Milinda, "Does this circle have an end, maharajah?"

"There is not, bhante."

"Even so, maharajah, are those cycles (cakka) spoken of by the Blessed One, thus:

'Visual consciousness arises on account of the eye and forms; the meeting of the three is contact.⁵⁴ On account of contact, there is feeling. On account of feeling, there is craving. On account of craving, there is karma.⁵⁵ From karma, the mind arises again—is there an end to this cycle (*santati*)?"

"There is not, bhante."

"And ear consciousness arises on account of the ear and sounds...

And nose consciousness arises on account of the nose and smells...

And tongue consciousness arises on account of the tongue and tastes...

And body consciousness arises on account of the body and touches...

And mind consciousness arises on account of the mind and mental objects; the meeting of the three is contact. On account of contact, there is feeling. On account of feeling, there is craving. On account of craving, there is karma. From karma, the eye arises again—is there an end to this cycle?

"There is not, bhante."

"Even so, maharajah, their first⁵⁶ point of this journeying ($addh\bar{a}na$) is not to be seen."

"You are capable, bhante." (Miln 51)

4 The store consciousness

4.1 YOGĀCĀRA DEVELOPMENTS

4.1.1 The Yogâcāra ("the practice of yoga"), one of the most important post-canonical Indian Buddhist schools, teaches a form of idealistic ("mind-only") philosophy. Its name comes from an important text of the school, the Yogâcāra,bhūmi Śāstra ("the treatise on the stages of yoga practice"): yoga here meaning mind-training or meditation, and ācāra, "conduct or practice." The school is also called Vijñāna,vāda ("the doctrine of consciousness") because of its philosophical position, which is that the reality a human being perceives does not exist, and only the consciousness of the momentary events (dharma) is real.

4.1.2 The school emerged in India around the 2nd century, and attacked both the full realism of the Theravāda and the provisional practical realism of the Mādhyamaka. It reached its apex in the 4th century, during the time of Asanga and Vasubandhu.⁵⁷ Following them, the school split into two: that of the

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⁵³ Milinda was probably Menander (r 2nd-1st cent BCE), a Bactrian king of Śākala in east Punjab.

⁵⁴ See **Madhu.piṇḍika S** (M 18,17/1:112), SD 6.14, **Pariññā S** (S 35.60/4:32), SD 6.17.

⁵⁵ *Upādāna,paccyā kammai*n, which is an innovation by the Miln author. Cf Miln 65 where it is said that the five sense-fields arise from different karmas.

⁵⁶ Purimā, lit "earliest."

⁵⁷ Maitreya,nātha, the little known teacher of Asanga, and the latter's half-brother, Vasubandhu, are usu regarded as the historical founders of the Yogâcāra school. **Vasubandhu** (late 4th cent) initially studied Sarvâstivāda Abhidharma as presented in the Mahā,vibhāṣā. Dissatisfied, he wrote an important summary and critique of the Mahā,-

textual tradition ($\bar{A}gam\hat{a}nusariņo\ Vij\tilde{n}\bar{a}nav\bar{a}da$) and that of the logical tradition ($Nyay\hat{a}nusariņo\ Vij\tilde{n}\bar{a}nav\bar{a}da$), the latter of which produced the great logicians Dignāga (c 480-540 CE) and his successor, Dharmakīrti (c 600-660 CE).

<u>4.1.3</u> Asaṅga (4th century) was the best known of the Yogâcāra teachers, best remembered for his development of the *ālāya*, *vijñāna* doctrine [4.2]. His approach is often known as *citta*, *matrā* ("mind-only"). **Richard King** gives a helpful summary of the nature of *citta* according to the Yogâcāra:

It is important to bear in mind that the Yogācāra conception of *citta/vijñāna* denotes a whole complex of events and processes which cannot be adequately rendered by English terms such as "consciousness" or "mind." The "*citta*" of *cittamatrā* includes within it the conscious apprehension of sensory objects (six in all including the *mano-vijñāna*). This is a crucial point to acknowledge since, for the Yogācāra school, the sensory apprehension of objects cannot be divorced from one's consciousness of it (though it is possible to make a purely abstract and theoretical distinction between *vedanā* on the one hand and *vijñāna*, *samjñā* and *samskāra* on the other when discussing the *skandhas*). In a sense the Yogācāra position offers the flipside to the standard Abhidharma position that *citta* is intentional, that is, that to be conscious is to be conscious of an object. For the Yogācāra, to postulate an object requires that it is first apprehended by a *citta*. The emphasis here is no longer on the suggestion that *citta* is intentional but rather on the fact that objects of consciousness are just that.

Thus, the thesis of the intentionality of *citta* becomes displaced in the emerging Yogācāra philosophy by an emphasis upon the "phenomenalistic" nature of objects. Objects are really dharma-constructs and representations (*vijñapti*), dependent upon the complex processes of *citta* for their appearance. Thus, one can talk of apprehending a sensory object only after one has become conscious of it. Sensory apprehension is thereby subsumed by the Yogācāra analysis under the broader domain of "*citta*," which, now more clearly than ever, remains too rich and allembracing a term to be rendered by "mind" or "consciousness".

As well as an awareness of sensory objects, *citta* also denotes the organising faculty of the *manas*, the affective distortion of that process by the defiled mind (*kliṣṭa manas*) as well as the subliminal karmic seeds (*saṃskāras*) and latent dispositions (*anusaya*) that are collectively known as the *ālayavijñāna*. The complexity of terms like *citta*, therefore, when combined with the Yogācāra endorsement of the category of *rūpa-dharma* and the acknowledgment that *vijñāna* remains only one of five *skandhas* suggests that it is problematic to interpret the early Yogācāra literature as propounding a form of idealism at least in the sense in which this has commonly been understood in the West. (Richard King, 1998:8)

4.1.4 For the Yogâcāra school any statement beyond the experiential limits of *citta* are mostly idle speculation, leading to the rise of conceptual distinction (*vikalpa*) and mental proliferation (*prapañca*). This approach is of course not new, as it is found in the Sautrāntika and the Theravāda. It is the case for the Yogâcāra that we are simply "imagining" our experiences. They are "real" to the extent that they are "merely given" (*vastu,matrā*) without our conscious apprehension, and this is beyond our conscious control.

4.2 ĀLAYA, VIJÑĀNA

<u>4.2.1</u> We have noted, in our study of consciousness, that *citta, mano* and *viññāṇa* often appear together as synonyms in both the Pali Canon and its Commentaries.⁵⁸ In fact, the early Buddhist schools, such as the Sarvâsti, vāda⁵⁹ and the Yogâcāra, ⁶⁰ too, take the three terms to be synonyms. A radical shift was,

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vibhāśā from the Sautrāntika viewpoint. Later, he converted to Mahāyāna, and became one of the most influential thinkers and commentators of the Yogâcāra school.

⁵⁸ SD 17.8a (1.1.2; 12).

⁵⁹ Eg cittam mano'tha vijñānam ekārtham (Abhidharma,kośa 2.34).

however, made by **Asaṅga** [4.1] who divided *vijñāna,skandha* (aggregate of consciousness) into three layers, roughly represented by *citta, manas* and *vijñāna*. Thus, he defines *vijñāna,skandha* in his **Abhi-dharma,samuccaya** as follows:

<u>vijñāna,skandha</u>,vyavasthānam katamat / yac cittam mano,vijñānam api || How is the consciousness aggregate defined? It is mind, thought, and consciousness.

tatra <u>cittam</u> katamat | skandha,dhātv-āyatana,vāsanā,paribhāvitatam sarva,bījakam **ālaya,vijñānam** | ...

Therein, what is <u>the mind</u>? It is **the store-consciousness** with all the seeds, pervaded with the impressions of the aggregates, the elements, and the spheres...

<u>manah</u> katamat | yan nitya,kālam manyan'ātmākam ālaya,vijñānam caturbhiḥ kleśaiḥ samprayuktam ātma,dṛṣṭy-ātman,snehâsmi,mānen'āvidyayā...

What is <u>thought</u>? It is the store-consciousness that is always thinking of the self, associated with the four defilements, namely, self-view, self-love, the "I am" conceit, and ignorance...

<u>vijñānam</u> katamat | ṣaḍ vijñāna,kāyaḥ | cakṣur,vijñānam śrotra,ghrāṇa,jihvā,kāya,mano,-vijñānam...

What is <u>consciousness</u>? It is the six groups of consciousness, namely, eye consciousness, ear consciousness, nose consciousness, tongue consciousness, body consciousness, and mind consciousness... (Abhsm:P 11-12)⁶¹

<u>4.2.2</u> Here again we see close parallels with the early Buddhist conception of <u>consciousness</u> or $vi\tilde{n}$ - $\tilde{n}\bar{a}na$ as rudimentary reaction of the sense-organs to sense-stimuli. This is, in fact, the outermost or most superficial layer of the $vij\tilde{n}\bar{a}na,skandha$ (which is similar to early Buddhist teaching).

Manas involves the aspects of mentating, thinking, reasoning, ideating, etc. *Citta*, here called $\bar{a}laya$,- $vij\bar{n}\bar{a}na$, 62 is the deepest and subtlest layer of the consciousness aggregate, containing all past impressions, and all good and bad potentials.

As such, Asanga effectively reversed the roles of *mano* and *citta* against those given in early Buddhism. However, this is merely a technical innovation which the Yogâcāra see as helpful in explaining, for example, where karma is "stored," that is, in a "store consciousness" (*ālaya,vijñāna*), the *citta*.

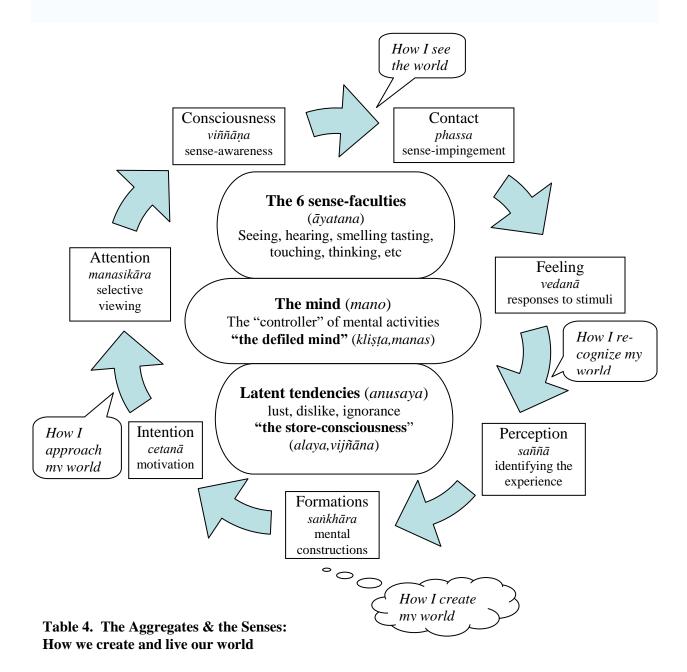
- 4.2.3 The store-consciousness (Skt \bar{a} laya, $vij\tilde{n}\bar{a}$ na)⁶³ or substratum consciousness is the eighth and the most fundamental of the 8 consciousnesses proposed in the teachings of the Yogâcāra school of Buddhism. Store-consciousness accumulates and "stores" all the past mental and physical karmic impressions ($v\bar{a}$ san \bar{a}) as the continuing potential for our existence, and serves as the support for all existences. It also receives impressions from the other consciousnesses, and retains them, in a mental receptacle, as it were. From it, the remaining seven consciousnesses arise and produce all present and future modes of samsaric experience.
- <u>4.2.4</u> Since the store-consciousness serves as the basis for the production of the other seven consciousnesses (called the "evolving" or "transforming" consciousnesses), it is also known as <u>the root consciousnesses</u> ($m\bar{u}la,vij\bar{n}\bar{a}na$) or causal consciousness. Since it serves as the receptacle for all experiential

⁶⁰ Esp Vasubandhu, in his Vimśatikā,vijñapti,matratā,siddhi: *cittaṁ mano vijñānaṁ vijñaptiś ceti paryāyāḥ* (Vimśs 3).

⁶¹ Also at W Rahula (ed & tr), *Le Compendium de la Super-doctrine (Philosophie) (Abhidharmasamuccaya) d'Asanga*, Paris, 1971:17. The same defs are briefly given in Mahāyāna,sūtrâlankāra: *cittam ālaya,vijñānam manas tad-ālambanam ātma,dṛṣṭy-ādi,samprayuktam vijñānam ṣaḍ vijñāna,kāyāḥ* (Mahāys 19.76/174). A polyglot version of Abhsm accessed on 26 Oct 2006, http://www.shiga-med.ac.jp/public/yugagyo/AS.html.

⁶² As at Sandhi,nirmocana Sūtra, ed & tr Lamotte, Paris 1935:55, 185.

impressions (metaphorically called $b\bar{\imath}ja$, "seeds"), ⁶⁴ it is also called the <u>seed consciousness</u> (種子識). $B\bar{\imath}ja$ here refers to the "seeds of defiled states" (*saṃkleśika,dharma,bīja*) ⁶⁵ that supports the run of samsara.



How we create and live in our virtual world

The above Table is a representation of how we experience the external and internal worlds. Through the six senses, "the mind" (*mano*) gives meaning to the physical world we experience, storing such data

⁶⁴ Chin 種子, Jap shuji.

⁶⁵ Sarva, <u>sāmkleśika, dharma, bīja</u>, sthānatvād ālayaḥ, "it is called ālaya because it is the place for the seeds of all defiled states" (Trimśikā 18).

as "latent tendencies" (*anusaya*) (in "the store-consciousness" (*ālaya,vijṇāna*), according to the Yogācāra Abhidharma). This stored existential consciousness is perpetuated recursively by the forward process of dependent arising (*anuloma*), so that we are imprisoned by our own virtual world. [The above diagram is for purposes of meditation theory, and not meant to be a historically accurate comparative study.]⁶⁶

(Diagram based on Caroline Brazier, *Buddhist Psychology*, 2003:106 = Fig 6.3) ©Piya Tan 2004; rev 2007 Nirvana is attained by "the turning around (*parāvṛtti*) of the store consciousness," called *āśraya,parāvṛtti*⁶⁷ or *parāvṛttâśraya*, ⁶⁸ "the turning around at the seat of consciousness"; sometimes, it is called *bīja,parāvṛtti*, ⁶⁹ "the conversion of the seeds." Yogâcāra philosophy equates this cognitive transformation with awakening itself. ⁷⁰

4.2.5 William Waldron, a Yogācāra specialist, gives this insightful contemporary paraphrase:

There is no single term in cognitive science that corresponds with $\bar{a}laya$ - $vij\bar{n}\bar{a}na$ other than, perhaps, "cognitive unconscious," which is probably about right, since in my view $\bar{a}laya$ - $vij\bar{n}\bar{a}na$ is not a single process at all, but rather a categorical term for a variety of processes. As Asaṅga says, "although it continuously arises in a stream of moments, it is not singular (ekatva)." (Yogā-cāra,bhumi, Derge #4038, 4a.5; T31.1606.580a18).

Hence, it can hardly count as an entity, either. In fact, strictly speaking, in the Buddhist view there are no entities at all. But there are mental processes that are not conscious, some of which are strictly individual and some of which have shared qualities or characteristics, not unlike the fact that sugar tastes sweet to most people, so if they all eat something sweet then their experiences will be similar. Extrapolate this to other aspects of human life—such as speaking a common language, having similar emotional responses to cultural symbols, or imagining similar things about one's own cultural, ethnic or national group—and you end up with a sense of common or collective awareness that is nevertheless, like all of us eating something sweet, still based in our individual sense faculties. I am quite certain that this is also what Jung, ⁷¹ for example, had in mind with his "collective unconscious."

That such collective illusions as nationalism or ethnic identity are illusory does not, unfortunately, make them any less effective nor any less pernicious. They are the illusions we all, to a greater or lesser degree, labor under and whose broader and long-term consequences determine much of our collective lives. (W Waldron, email posting, 2008)⁷²

4.3 ROOTS OF ĀLAYA, VIJÑĀŅA IN EARLY BUDDHISM

4.3.1 The term $\bar{a}laya$ (ts) is ancient and common in the early Buddhist texts, where it is used in the literal, figurative and psychological senses, thus (according to CPD & BHSD, sv $\bar{a}laya$, selected):

1. Literal (physical) senses of *ālava*

- (a) house, dwelling, habitat, household, a built structure: Ap 507,19 (*vanâ*~); DhA 2:170,4, 162,10 (implied household attachment).
- (b) nest, lair, perch, shelter: Tha 307; Ap 121,15, 534,7; MA 2:216,2 = AA 3:202,2; UA 56,3.
- (c) abode, seat, place of rest, resort, haven, repository: S = 5:400,21* = A :2:55,32*.

⁶⁶ On "defiled mind" and "store-consciousness," see PaulWilliams, *Buddhist Thought*, 2000:159 f.

⁶⁷ Trimśikā 22, 44; Śūtrâlankāra 11.44; Lankâvatāra Ś 10.14, 93.3.

 $^{^{68}}$ Laṅkâvatāra S 9.11.

⁶⁹ Sūtralaṅkāra 11.44.

⁷⁰ See "the Eightfold Proof of Store-consciousness in the Abhidharma-Samuccayabhāṣya" in PJ Griffiths, *On Being Mindless: Buddhist meditation and the mind-body problerm*, La Salle, IL: Open Court, 1986:129-138 (Appendix C).

⁷¹ On the Swiss psychologist and psychiatrist <u>Carl Gustav Jung</u> (1876-1961), founder of analytical psychology, see http://www.cgjungpage.org/.

⁷² Email to Bruce Burrill, which he posted on Buddha-L forum, 27 Nov 2008.

- (d) domain, field of activity, sphere, ken: D 3:147,6* (sīlâ~); Ap 3,9.
- 2. Psychological senses of *ālaya*
- (a) liking, inclination, attachment, fondness for, partiality towards: MA 5:57,18; DhA 1:121,15 = 18, 4:183,18.
- (b) affection, love: SA 1:38,2; J 6:458,2.
- (c) (as a psychological concept) desire, yearning, clinging, (sensual) attachment (= taṇhā): V 1:4,35 ff; M 1:167,32-34, 191,4; S 1:136,11 ff; A 2:34,24, 2:131,30-34; Sn 177 = S 1:33,3* (two kinds: kāmesu taṇhā,diṭṭhi,vasena) [BHS has three ~āni = tṛṣṇā: kāma~, bhava~, vibhava~, BHSD: tṛṣṇā 2], Sn 535 (SnA 433,4, two kinds mentioned), 635 = Dh 411; U 12.18; VA 5:961 = DA 3:464 = MA 2:174 = SA 1:195 (= pañca,kāma,guṇa).
- <u>4.3.2</u> Especially interesting is that $\bar{a}laya$ is mostly used in the Canon in its *psychological sense* (2c), but in the Commentaries, it is more commonly used in its literal and physical sense (as an abode). We can also see that the Pali usage of $\bar{a}laya^{73}$ is very close to its Mahāyāna sense. The Yogâcāra terms, $\bar{a}\dot{s}raya,par\bar{a}vrtti$ and $b\bar{i}ja,par\bar{a}vrtti$, are practically identical in sense to the Pali terms $\bar{a}laya,samuggh\bar{a}ta$, the "uprooting of $\bar{a}laya,$ " and $kh\bar{i}na,b\bar{i}ja$, one whose "seeds of defilement are destroyed," an epithet of the arhat. The Commentaries, however, take $\bar{a}laya$ to have the simple meaning of "the 5 cords of sensepleasure" ($pa\tilde{n}ca,k\bar{a}ma,guna$) [meaning 2c], an idea elaborated in Yogâcāra philosophy.
- <u>4.3.3</u> It can thus be seen that the Yogâcāra notion of *ālaya*, *vijñāna* is already found in seminal form in the Pali suttas, and which in fact is also an expedient in the explanation of the early doctrine of <u>karma</u>, especially "where" or how karma is "stored."
- <u>4.3.4</u> In due course, however, later Mahāyāna philosophy parted ways with early Buddhism, as it were, in their highly controversial conception of the *tathāgata,garbha*, "the Buddha embryo" or "Buddha-seed," which holds that all beings inherently have the potential to become a Buddha. The Lankâvatāra Śūtra, for example, uses the term *tathāgata,garbha* as a synonym for *ālaya,vijñāna,* describing it as being "radiant by nature" (*prakṛti,prabhāsvara*) and "pure by nature" (*prakṛti,pariśuddha*), but is "soiled on account of adventitious defilements" (*āgantuka,kleśopaklistatayā*).
- 4.3.5 This passage is closely parallel to the Anguttara statement that "this mind is radiant, but it is defiled by adventitious impurities [that go through the sense-doors]"!⁷⁸ In the Lankāvatāra Sūtra, the *tathāgata,garbha*⁷⁹ is regarded as eternal and permanent in the sense that emptiness (*śūnyatā*) is eternal and permanent (p778). It further equates it with *the ālaya,vijñāna* or store-consciousness of Yogācāra thought.⁸⁰ This is a similar concept to that of the Theravādin *bhavanga citta*, wherein both systems incorporate mentation or conception (*manas*) and the six forms of sense-consciousness (Harvey 1990:107-109).
- **4.3.6** As in all philosophical developments, conceptual problems often arise, because it is rare that many can at once notice or accept the same or overlapping ideas, often from lacking in-depth knowledge of the related topics or teachings (especially the early Buddhist teachinggs). Both early Buddhism and early Mahāyāna agree that it is the mind, or in the Yogâcāra's context, the *ālaya,vijñāna* that is often mistaken by people to be an abiding entity (such as a self or soul). 81

http://dharmafarer.org 75

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⁷³ See esp **Ariya,pariyesanā S** (M 26.19/1:167), SD 1.11; **Āyācana S** (S 6.1.3/1:136), SD 12.2. In Mahāyāna,saṅgraha, Asaṅga qu a Śrāvaka,yāna text, identified by Lamotte (Mahāys:L 26) as **Acchariya S 2** (A 4.128.1/2:131), SD 31.6 Intro.

 $^{^{74}}$ A 2:34,25 = 3:35,30 = It 88,5 (\approx V 3:20,4 = 111,29 \approx J 5:483,7). See CPD sv for more refs.

⁷⁵ Sn 235.

⁷⁶ Laṅkâvatāra S 221, 222.

⁷⁷ Lankâvatāra S 77, 222, Cf D T Suzuki, Studies in the Lankāvatārasūtra, London, 1930:182.

⁷⁸ Pabhassaram idam bhikkhave cittam tañ ca kho āgantukehi upakkilesehi upakkiliṭṭham (A 1.6.1-2/1:10; also 1.5.9-10/1:10), SD 8.3.6. Qu at MA 1:167; DhA 1:23; NmA 1:22; PmA 1:242; DhsA 68.

⁷⁹ On the *tathāgata,garbha*, see SD 8.3(14).

⁸⁰ See Harvey 1995:161 f, 175 f, 217 f.

⁸¹ Mahāyāna Sangraha 14; Trimśikā 16, 22.

Hence, ideas such as taking the "store-consciousness" to more than a figure of speech, gives us a false notion that there is something permanent or eternal. With the rise of the notion of *tathāgata,garbha*, this wrong view becomes "authenticated" into a dogma. The notion of an abiding self or soul has been smuggled into Buddhism.⁸²

<u>4.3.7</u> The Brahma,jāla Sutta (D 1), for example, states that there are those who, through cultural conditioning or using reasoning, regard the "mind" (*citta*), or "thought" [mentation] (*mano*), or "consciousness" (*viññāṇa*)⁸³ as being "permanent, stable, eternal, not subject to change: it will remain so just as eternity itself." The Mahā Taṇhā,saṅkhaya Sutta (M 38) shows how the Buddha takes great pains to correct the monk Sāti's wrong view that "it is this same consciousness," not another, that runs and flows through the rounds of births."

4.4 VACUUM STATES OF CONSCIOUSNESS

<u>4.4.1</u> **B Alan Wallace,** US science philosopher and Buddhist practitioner,⁸⁷ in his essay entitled, "Vacuum states of consciousness: A Tibetan Buddhist view," gives a remarkably clear and contemporary explanation of the nature of consciousness and space, and how both science and Buddhism can comfortably share a common view of them. According to Wallace, the Theravada Abhidhamma conception of *bhav'anga* (literally, the "ground of being")⁸⁸

may be characterized as a relative vacuum state of consciousness, voided of all manner of mental activity known as javana. This appears to be identical to the substrate consciousness ($\bar{a}layavij-\tilde{n}\bar{a}na$) [4.2]... This state of consciousness is presented not simply as a philosophical speculation but as an experienced mental phenomenon that can be accessed through the achievement of meditative quiescence ($\dot{s}amatha$). According to the Great Perfection [Dzogchen] school, primordial consciousness ($j\bar{n}\bar{a}na$) may be regarded as an ultimate ground state of consciousness, and it can allegedly be ascertained non-dually through the cultivation of contemplative insight ($vipa\dot{s}yan\bar{a}$). These relative and ultimate vacuum states of consciousness bear remarkable similarities with the definitions of relative and absolute vacuum states of space presented in contemporary physics. The Buddhist and scientific views may be regarded as complementary, each having its own strengths and weaknesses. (Wallace 2006a:1 f, "Abstract")

<u>4.4.2</u> One of the most important contributions to Buddhist psychology is the Abhidhamma theory of consciousness that distinguishes between mental activity, called *javana* (impulsion), and the mental ground out of which such activity emerges, that is, the *bhavanga* (life continuum). The Abhidhamma term *javana* refers to all kinds of conscious mental processes, including sense-perceptions, discursive thoughts, memories, intentions, desires and imagination, most of which can be observed by means of mental perception [5].

The *bhavanga*, according to the Abhidhamma, in the absence of sense-perceptions and cognitive activities, is, comments Wallace,

⁸² Some contemporary Buddhists, esp westerners, eg, still have difficulties giving up the soul-view: see eg **The teacher or the teaching?** SD 3.14 (1.2.5.2; 1.2.6).

⁸³ On these three terms, see *Viññāṇa*, SD 17.8a (12).

⁸⁴ D 1,2.13/1:21 = SD 25.2.

⁸⁵ "Consciousness," *viññāṇa*: see SD 17.8a. On *viññāṇa* as a link in dependent arising, see (**Paṭicca,samuppāda**) **Vibhaṅga S** (S 12.2/2:2-4), SD 5.15.

 $^{^{86}}$ M $^{38/1}$:256-271 = SD 7.10.

⁸⁷ Wallace (b 1950) is an author, translator, teacher, researcher, interpreter and Vajrayana practitioner interested in the intersections of consciousness studies and scientific disciplines such as contemplative neuroscience. He has a bachelors degree in physics and philosophy of science from Amherst College and a PhD in religious studies from Stanford. He also founded (2003) and is President of the Santa Barbara Institute for Consciousness Studies.

⁸⁸ Wallace's tr.

⁸⁹ On *javana*, see SD 19.14(2.2).

⁹⁰ See eg Peter Harvey, *The Selfless Mind*, 1995:155-179 (ch 10) & passim (see index). Also Wallace 2001a:24, 2001b:7 f (online ed).

the resting ground state of consciousness, withdrawn from the physical senses. While all mental and sensory processes are *conditioned* by the body and the environment, in the Buddhist view they actually *emerge* from the *bhavanga*, not the brain. Described as the natural, unencumbered state of the mind, its innate radiance and purity are present even when the mind is obscured by afflictive thoughts and emotions. The *bhavanga* may be characterized as a "vacuum" state of consciousness, voided of all manner of *javana*. Generally speaking, it is indiscernible while the mind is active, for it normally manifests only in dreamless sleep and during the very last moment of a person's life. Indeed, Buddha declared that there are multiple similarities in the cognitive processes while falling asleep and dying. ⁹²

To unlock this natural purity and luminosity of consciousness so that its radiant potential is revealed, one must calm the involuntary activity of the mind through the practice of meditative quiescence. ⁹³ In this way, one can see through the superficial turbulence of the mind into its limpid depths. In the Buddhist view, the *bhavanga* acts as the basis for all volitional states of consciousness, and thus for *karma*; and it is therefore the basis for the emergence of the world experienced by each individual. (Wallace 2006a:4 f)

4.4.3 Both early Buddhism and Tibetan Buddhism make a distinction between what might be called the *substrate* and the *substrate consciousness*. While in the early Buddhist texts the substrate is called *upadhi*, ⁹⁴ it is called *ālaya*⁹⁵ is the later schools (such as the Tibetan). The term *upadhi* is common in the early Suttas, ⁹⁶ and the attainment of nirvana is said to be "the abandoning of all substrates" (*sabbûpadhi paṭinissagga*). ⁹⁷ The early usage of *upadhi* is more broad and can refer to either *the objects* of desire (property, belongings, etc) (eg Sn 33), that is, the worldly sense, or to the *desire* for such objects (eg Sn 364, 546, 728), that is, the psychological sense.

<u>4.4.4</u> The Commentaries generally define *upadhi* as both objectively and subjectively as being fourfold, namely, "the 5 aggregates (*khandha*), defilements (*kilesa*), the cords of sense-pleasures (*pañca kāma,guṇa*), and karma-formations (*abhisaṅkhāra*, ie karma)." The Buddhist Sanskrit term *ālaya* similarly has an objective ("home, house, dwelling, abode") and a subjective ("desire, inclination, attachment"). If we accept that the early teachings tend to be less technical than later doctrines, then *upadhi* (that is, *desire* as a synecdoche for the 3 unwholesome roots) is synonymous with the Buddhist Sanskrit term *ālaya*.

⁹¹ Paṇihita Acchanna Vagga (A 1.5/1:8-10), SD 8.3(4)

⁹² Harvey 1995:159 f

⁹³ Wallace, *The Bridge of Quiescence*, 1998 & "The Buddhist tradition of Śamatha," 1999:175-187.

⁹⁴ The Pali term $up\bar{a}di$ ("clinging," from $upa + \bar{a} + d\bar{a}$ "to take") is often confused with the Buddhist Hybrid Sanskrit $up\bar{a}dhi$ (meaning "remnant, substrate," or more correctly, "acquisitions" or "belongings," attachment to which leads to rebirth). Despite the subtle but important difference in meaning, most modern commentators regard them as synonymous, and do not try to explain how and why the difference arose (see KR Norman, "Mistaken Ideas about *Nibbāna*," *The Buddhist Forum* 3, ed T Skorupski & U Pagel, 1995:215)

⁹⁵ *Ālaya* (ts) lit means "home, dwelling, habitat, household, a built structure; but is usu used in the fig sense of "liking, inclination, attachment" or "desire, sensual attachment." See CPD sv.

⁹⁶ Sn 33, 364, 546, 728.

⁹⁷ The full phrase with syns: Sabba,saṅkhāra,samatho sabbûpadhi,paṭinissaggo taṇha-k,khayo virāgo nirodho nibbānaṁ, Vinaya (V 1:5,3), Mahā'padāna S (D 14,3.1/2:36), Alaggadûpama S (M 22,20/1:136 + 21/1:137), Āyācana S (S 6.1/1:136), Channa S (S 22.90/3:133, 134), Āpaṇa S (S 48.50/5:226), (Duka) Padhāna S (A 2.1.2/-1:49 ×3), (Dasaka) Samādhi S (A 10.6/5:8), (Ekā,dasaka) Saññā S (A 11.7/5:320), Mahā Niddesa (Nm 1:27 = 424). Comy: "The settling of of all formations, all this is itself nirvana (sabba,saṅkhāra,samatho ti ādi sabbaṁ nibbānam eva," DA 464).

⁹⁸ Upadhî ti khandha,kilesa,kāma.guṇâbhisankhāra,bhedā cattāro (SnA 436); upadhīsû ti khandha,kilesâbhisan-khāresu (SA 1:270); khandhûpadhi abhisankhārûpadhi pañca,kāma,guṇûpadhî ti ime upadhayo honti (MA 5:60 ad M 3:245,21).

Both the terms have a common sense of "substrate" that serves that the underlying cause and condition for continued suffering. What is even more interesting is how the connection between $\bar{a}laya$ and $\bar{a}laya$, $vij\tilde{n}\bar{a}na$ gives us a better understanding of what consciousness is and how it arises. Wallace explains:

In the later Great Perfection (Dzogchen) school of Tibetan Buddhism...a distinction is made between the substrate ($\bar{a}laya$) and the substrate consciousness ($\bar{a}layavij\bar{n}\bar{a}na$). Tibetan contemplatives describe the substrate as the objective, empty space of the mind. This vacuum state is immaterial like space, a blank, unthinking void into which all objective appearances of the physical senses and mental perception dissolve when one falls asleep; and it is out of this vacuum that appearances re-emerge upon waking. (Wallace 2006a:6)

Pali term	Sanskrit term	Wallace's translation
upadhi (substrate)	ālaya (store-house)	substrate
bhavaṅga (life continuum)	ālaya vijñāna (store-house consciousness)	substrate consciousness; "false vacuum" [4.6.2]
javana (impulsion)	javana (impulsion)	mental activity
ñāṇa (wisdom)	<i>jñāna</i> (knowledge)	primordial consciousness
dhamma,dhātu (dharma element)	dharma,dhātu (dharma-realm)	absolute space of phenomena; "true vacuum" [4.6.2]

Table 4.4 A comparison of key Buddhist cognitive terms and their translations

4.4.5 Both the Pali scripture and the Sanskrit tradition agree that when the mind and the physical senses are dormant (such as during deep, dreamless sleep, fainting, coma, dhyana, and the dying moment), there only remains the **bhavanga**, that is, "the basis for the emergence of all appearances to an individual's mind-stream," that is, a sort of "central processing unit" that reconstructs phenomena appearing to sense- and mental perception into something intelligible to the perceiver. In its natural state, uncovered by preconceptions, mental hindrances and ignorance, it is a radiant and clear consciousness. ¹⁰¹

This self-created virtual world of appearances is superimposed, as it were, over the real world, hiding true reality. It is like looking through coloured lenses, or seeing the drizzling flying past horizontally while one is inside a moving vehicle (when the rain is really falling vertically down). Wallace is careful to point out that

By fathoming the nature of the substrate consciousness, one comes to know the nature of consciousness in its relative ground state. This realization, however, does not illuminate the nature of reality as a whole. It is also important not to confuse this substrate consciousness with a collective unconscious, as conceived by Carl Jung. Buddhist accounts of the substrate consciousness all refer to it as an *individual* stream of consciousness that carries on from one lifetime to the next.

The Buddhist tradition claims that the *appearances* to our senses do not exist in external, physical space, independent of perception. Likewise, the *objects* that make up our experienced world, each of them imbued with sensory attributes, such as color, taste, smell, and texture, are not to be found in the objective space described by modern physics. But within the context of our experienced world, it is conventionally valid to say that the physical objects we perceive in the

⁹⁹ Dudjom Lingpa, *Dag snang ye shes drva pa las gnas lugs rang byung gi rgyud rdorje'i snying po*; Skt: Vajra-hṛdayaśuddhadhutijñānahāreśrīlamjātiyātisma. *Collected Works of HH Dudjom Rinpoche* 68.

¹⁰⁰ Wallace 2006a:6

¹⁰¹ See Paṇihita Acchanna Vagga (A 1.5/1:8-10), SD 8.3(4)

¹⁰² See *Saññā*, SD 17.4(1).

world around us, such as planets and stars, exist within the external, intersubjective ¹⁰³ space of consciousness; and the mental objects we perceive, such as thoughts and mental images, exist in the internal, subjective space of the consciousness of each individual. (Wallace 2006a:7 f)

4.5 THE DHARMA, DHĀTU

4.5.1 Sensory images. According to Buddhist psychology, the physical world exists, the world out there is real. However, our *perception* of the world, its appearances to our senses does not exist in the external physical spaces, independent of perception. Similarly, the *sense-objects* that comprise our experienced world, along with their sensory qualities of form, colour, smell, taste, and texture, are not found in the objective space described by modern physics. **Wallace** explains:

But within the context of our experienced world, it is conventionally valid to say that the physical objects we perceive in the world around us, such as planets and stars, exist within the external, intersubjective ¹⁰⁴ space of consciousness; and the mental objects we perceive, such as thoughts and mental images, exist in the internal, subjective space of the consciousness of each individual.

Neuroscientists commonly assume the human brain exists in the real, objective space of physics, but all their sensory images and concepts of the brain appear in the space of consciousness. Moreover, all the *sensory images* of space experienced by physicists arise within the external space of their consciousness, and all their *concepts* of space emerge within the internal space of consciousness. Although we may believe in the existence of space independent of consciousness, all our concepts of such real, objective space arise within the space of consciousness.

As for the relation between sensory images and their related objects believed to exist in the objective world independent of consciousness, neurologist **Antonio Damasio** acknowledges, "There is no picture of the object being transferred from the object to the retina and from the retina to the brain." ¹⁰⁵

To generalize, the appearances to our senses are not replicas, or re-presentations, of phenomena in objective, physical space. They are fresh creations arising in the space of consciousness.

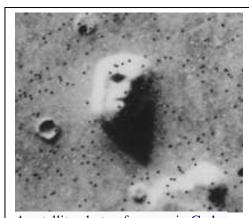
Likewise, our concepts of space and the objects within it are not replicas of anything existing independently of the mind. In short, the brain believed by neuroscientists to exist in real, objective space is as devoid of consciousness as is the physical space conceived of by physicists.

(Wallace 2006a:8 f; emphasis added & reparagraphed)

4.5.2 Pareidolia.

4.5.2.1 Paredolia is a psychological phenomenon involving a stimulus (an image or a sound) which the mind perceives as a familiar pattern where none actually exists. Common examples are perceived images of animals, faces, or objects in cloud formations, the "man in the moon," the "moon rabbit," and hidden messages within recorded music played in reverse or at higher- or lower-than-normal speeds.

Pareidolia is the visual or auditory form of <u>apophenia</u>, ¹⁰⁶ which is the perception of patterns within random data. Com-



A satellite photo of a mesa in <u>Cydonia</u>, often called the <u>Face on Mars</u>. Later imagery from other angles did not show the illusion. (<u>Wikipedia</u>)

¹⁰³ By "intersubjective," Wallace means "the dynamic interrelation of self and other," on which, see eg Wallace 2001a.

¹⁰⁴ By "intersubjective," Wallace means "the dynamic interrelation of self and other," on which, see eg Wallace 2001a

¹⁰⁵ Antonio Damasio, The Feeling of What Happens, 1999: 321.

¹⁰⁶ https://en.wikipedia.org/wiki/Apophenia.

bined with apophenia and <u>hierophany</u>, ¹⁰⁷ pareidolia may have helped ancient societies organize chaos and make the world intelligible. ¹⁰⁸

4.5.2.2 Do these pareidolic images exist in internal space or in external space? These are mind-made images, but we superimpose them outside of our minds. But each one of us tend to perceive that external space subjectively.

However, when we turn our attention inwards and focus on an image of the moon, for example, what we perceive may be virtually the same as other people's perception of it. Whatever we perceive in our separate minds is more *intersubjective* than the images we superimpose on external space. In short, says Wallace.

there is nothing inherently external or intersubjective about external space, nor is there anything inherently internal or private about internal space. While we commonly speak of directing the attention outward to the physical world or inward to the mind, this distinction is only conventional. Our experience presents us only with the nondual space of consciousness, in which the distinctions between outer and inner are artificially superimposed by concepts and language. ¹⁰⁹

(Wallace 2006a:10)

<u>4.5.3 DHARMA, DHĀTU</u>. Wallace goes on to say that in the Dzogchen tradition of Tibetan Buddhism the non-duality of external and internal space is called *dharma*, *dhātu*, or absolute space phenomena, out of which emerge all the phenomena that make up our intersubjective experienced world.

It is important to note here that the Sanskrit *dharma*, *dhātu*, as used here, is a very different term from *dhamma*, *dhātu* of the Pali Suttas, whose usages can be summarized as follows:

- (1) As a mental element that constitutes and conditions the perceptive process, that is, as "mind-element" (mano,dhātu), "mind-object element" (dhamma,dhātu) and "mind-consciousness-element" (mano,viññāṇa,dhātu). Here, the mind-object element "includes the types of subtle material phenomena not involved in sense-cognition, the three mental aggregates of feeling, perception, and formations, and Nibbāna. It does not include concepts, abstract ideas, judgements, etc. Though these latter are included in the notion of mind-object (dhamm'ārammaṇa), the mind-object element includes only things that exist by their own nature, not things constructed by the mind." (M:Ñ 1324 n1077).
- (2) <u>As "element of the Dharma</u>," that is, the knowledge of a disciple's perfection, which is capable of seeing the principle of conditionality without obscuration (SA ad S 12.32/2:56).
- (3) As ultimate principle of the Dharma, or universal principle. 111

Usage (1) is the most common in the Pali Suttas, (2) is rare, and three is probably the latest sense. However, we can easily see the Sanskrit term, $dharma, dh\bar{a}tu$, as a natural philosophical development of the nascent idea in the early texts.

<u>**4.5.4 Relative vacuum and absp;ute vacuum.**</u> Wallace then introduces the useful concepts of "relative vacuum" and "absolute vacuum":

All appearances of external and internal space, time, matter, and consciousness emerge from the $dharmadh\bar{a}tu$ and consist of nothing other than configurations of this absolute space. While the

¹⁰⁷ Or, "manifestation of the sacred." In the hierophanies recorded in myths, the sacred appears in the form of ideal models (the actions and commandments of gods, heroes, etc). By manifesting itself as an ideal model, the sacred gives the world value, direction, and purpose: Mircea Eliade: "The manifestation of the sacred, ontologically founds the world" (*The Sacred and the Profane*, tr W R Trask, NY, 1961:21).

¹⁰⁸ P Bustamante; W Fay YAO, D Bustamante. "Search for meanings: from pleistocene art to the worship of the mountains in early China. Methodological tools for Mimesis," 2010: http://www.rupestreweb.info/mimesis.html.

¹⁰⁹ For more elaborate discussions of this theme, see B Alan Wallace, *The Taboo of Subjectivity: Toward a New Science of Consciousness*, New York: Oxford University Press, 2000:62-67, 110-117; William James, *Essays in Radical Empiricism*, Cambridge, MA: Harvard University Press, 1912/1976. (Wallace's fn)

¹¹⁰ M 115.4/3:62; S 2:140, 143, 145 f (×2), 146, 148 f (×2); A 4:285.

¹¹¹ D 14.1.13+15/2:8-10; M 58.11/1:396; S 2:143 f.

<u>relative vacuum</u> of the substrate can be ascertained by means of the cultivation of meditative quiescence [śamatha], the absolute vacuum of the **dharmadhātu** can be realized only through the cultivation of contemplative insight [vipaśyana]. The mode of awareness with which one ascertains this absolute space is called *primordial consciousness* (jñāna), which is the ultimate nature of all individual continua of consciousness.

The experiential realization of <u>absolute space</u> by primordial consciousness transcends all distinctions of subject and object, mind and matter, indeed, all words and concepts. Such insight does not entail the meeting of a subjective mode of consciousness with an objective space, but rather the nondual realization of the intrinsic unity of absolute space and primordial consciousness. The *dharmadhātu* and primordial consciousness are coterminous, nonlocal, and atemporal. While the *dharmadhātu* is the fundamental nature of the experienced world, primordial consciousness is the fundamental nature of the mind. But since the two have always been of the same nature, the view of the Great Perfection [Dzogchen] is not one of philosophical idealism, dualism, or materialism. All such distinctions between subject and object, mind and matter are regarded as mere conceptual fabrications. (Wallace 2006a:10 f; emphases added)

4.6 THE ILLUSION OF KNOWLEDGE

<u>4.6.1</u> The focused mind, that is, the mind in dhyana, for example, is able to experience *bhavanga*, the substrate consciousness. For such a mind, however, the mental hindrances are only temporarily suppressed, and as such, the substrate consciousness, as "relative vacuum," is experienced. However, when the primordial consciousness or direct knowledge $(j\tilde{n}\bar{a}na)$ is attained, all mental afflictions and obscurations are removed forever.

When we experience the substrate consciousness through meditative calm, we only realize the relative nature of personal consciousness. When we realize primordial consciousness, the range of our awareness is limitless. It is in this sense that the Mahāyāna speak of "samsara as nirvana, and nirvana as samsara," that is, the ineffable unity of absolute space and primordial consciousness (called "the great perfection," *Dzogchen*, in Tibetan), and often referred to as the "one taste" of all phenomena. It is also in this sense that this familiar state should be understood:

Citta, pūrvangamās ca sarva, dharmāḥ / citte parijnāte sarva, dharmāḥ parijnātā bhavanti |... ap tu cittam evāsya vasam gacchati / cittenāsya vasībhūtena sarva, dharmā vasībhavantî ti \parallel^{113}

All things are preceded by the mind. When the mind is comprehended, all things are comprehended...

When the mind is under control, all things are under control by the mind.

(Ratna, megha Sūtra)¹¹⁴

<u>4.6.2</u> The terms *relative vacuum* and *absolute vacuum* are not found in traditional Buddhist literature, and have been introduced into Buddhism by **Wallace** from modern physics, and for good reason:

I have borrowed these terms from modern physics, and in so doing I invite a comparison between scientific and Buddhist concepts of vacuum states of space and of consciousness. In physics, a **vacuum** is commonly defined as the lowest possible energy state of a volume of space, and this definition can be applied to numerous other systems, such as an electric charge embedded in space. I have taken this definition and applied it to consciousness. *A false vacuum* is one that is

¹¹² HH the Dalai Lama, *Dzogchen: The Heart Essence of the Great Perfection*, tr Geshe Thupten Jinpa & Richard Barron. Ithaca, NY: Snow Lion Publications, 2000.

¹¹³ Skt: http://www.sub.uni-goettingen.de/ebene_1/fiindolo/gretil/1_sanskr/6_sastra/3_phil/buddh/sanss06u.htm.

¹¹⁴ Cited in Śāntideva's Śikṣā,samuccaya ch 6 (ed PL Vaidya, Darbhanga: Mithila Institute, 1961:68). See Śīkṣs: BR, Bendall & Rouse (trs) 1971:121 f. Cf Dh 1-2.

not utterly devoid of energy, but it is the lowest possible energy-state under present circumstances. ¹¹⁵ Such a vacuum has energy and structure and is therefore not perfectly symmetrical.

Any configuration of mass-energy, including light itself, is viewed by physicists as an excitation of empty space, or more accurately, as an oscillation of abstract field quantities in space, not an oscillation of space itself. The fluctuating masses in a vacuum are regarded metaphorically as "frozen energy," and they cause a curvature of space, such that the distances between two points in space also fluctuate. Physicist **Henning Genz** writes in this regard, "Real systems are, in this sense, 'excitations of the vacuum'—much as surface waves in a pond are excitations of the pond's water...the properties of the physical vacuum define the possible excitations—the possible systems that can emerge from the physical vacuum...The vacuum in itself is shapeless, but it may assume specific shapes. In doing so, it becomes a physical reality, a 'real world.'" 116

Scientists do not have a clear idea of *the true vacuum*—of whatever remains once they have removed from some well-defined space everything that the laws of nature permit them to take away. The reason is that this depends on the laws of nature—*all* of them, including those that scientists have not yet discovered. In the frozen, or false, vacuum, quarks, electrons, gravity, and electricity are different, whereas in the perfect symmetry of the true, or melted, vacuum, which is devoid of any internal structure, they are undifferentiated. According to science writer **K C Cole**, "The closest we can probably come to imagining perfect symmetry is a smooth, timeless, feature-less empty space—the proverbial blank slate, the utter silence. It can't be perceived because nothing can change. Everything would be one and the same; everything would be the same, as far as we could tell, as nothing." (Wallace 2006a:14 f; emphases added)

4.6.3 Like water freezing into ice, the inflated vacuum (that is, expanding universe) freezes into the structure that gives rise to quarks, electrons, monomers (eg amino acids), polymers (eg DNA and proteins) and eventually us. 118 We can see here how remarkably close the views of the role of the true vacuum of physical space in the formation of the universe is to the Buddhist views of the relation between the absolute space of phenomena and the relative world of space and time, mind and matter.

<u>4.6.4</u> This parallel between Buddhism and science is all the remarkable in the light of the fact that scientists have not yet discovered the true nature or origins of consciousness. **Wallace** explains:

The Scientific Revolution began with the assumption that an external God created the world prior to and independently of human consciousness. Physicists then set themselves the goal of perceiving that objective universe from a "God's-eye" perspective and formulating its laws in terms of God's own language, which they thought to be mathematics. Since *they were focused on the realm of objective space and its contents that exist independently of consciousness*, it was quite natural for them to marginalize the role of mind in nature; and their theories of the true and false vacuums naturally make no reference to consciousness.

Indeed, advocates of this mechanistic view have assumed from the outset that consciousness plays no significant role in the universe. As **Antonio Damasio** proclaims, "Understanding consciousness says little or nothing about the origins of the universe, the meaning of life, or the likely destiny of both." Such confidence is remarkable in [the] light of the fact that <u>neuroscientists</u> have not yet discovered the nature or origins of consciousness.

In the meantime, many neuroscientists share what Damasio calls his "one goal and one hope," namely, to formulate a comprehensive explanation for how the sort of neural patterns that

¹¹⁵ "The false vacuum state of consciousness is known in Buddhist literature as the *bhavanga*, from Pali and Sanskrit, which is a kind of substrate consciousness." (Wallace 2001b:7)

¹¹⁶ Henning Genz, *Nothingness*, 1999:26. (Wallaces's fn)

¹¹⁷ KC Cole, The Hole in the Universe, 2001:244. (Wallaces's fn)

¹¹⁸ KC Cole 2001:177 f; cf H Genz 1999:312.

¹¹⁹ Damasio, The Feeling of What Happens, 1999:28.

can be currently described with the tools of neurobiology, from molecules to systems, give rise to states of consciousness. 120

Such researchers commonly assume that they already *know* that consciousness has no existence apart from the brain, so the only question to be solved is *how* the brain produces conscious states. This assumption is an instance of what historian **Daniel Boorstin** calls an "illusion of knowledge." It is these, he proposes, and not mere ignorance, that have historically acted as the greatest impediments to scientific discovery.¹²¹

The significance of the vacuum states of physical space and of consciousness can hardly be overestimated. Physicist **John March-Russell** declares, "The current belief is that you have to understand all the properties of the vacuum before you can understand anything else." Physicists have not yet fathomed all the properties of the vacuum or all the laws of nature, but they have widely assumed that consciousness is irrelevant to the universe they are trying to understand. Insofar as the universe conceived by physicists exists independently of consciousness, Buddhists may counter that such a universe is irrelevant to the world of human experience, in which consciousness plays a crucial role.

Neither the scientific nor the Buddhist view of the vacuum is complete. The scientific view of the universe has little to say about the origins, nature, or role of consciousness in nature. And the Buddhist view has no objective, quantitative means of examining vacuum states of space. Rather than viewing the modes of inquiry of these two great traditions as incompatible, it may be more fruitful to regard them as complementary. Like focusing two eyes on the same reality, with the integration of these two perspectives, we may discover a deeper and more encompassing vision than either tradition has achieved on its own.

(Wallace 2006a:17-19; emphases added and reparagraphed)

5 The consciousness process

5.1 TWO KINDS OF MIND

<u>5.1.1 Translation</u>. *Viññāṇa* has been variously translated as "bare sensation" or "pure consciousness," but **Boisvert** argues that far from being "bare sensations devoid of any content" (1995:117), it is "probably the faculty needed for the cognition of pure percept, of sensation and of conceptualization as well" (1995: 118). Consciousness here is best understood in reference to the theory of *citta,vīthi* (the mind-process), "found fully developed in the commentaries, in skeletal form in the Paṭṭhāna, and even alluded to in seed form in the Suttas." (Harvey 1996:95)

In this, what is known by "eye- $vi\tilde{n}\tilde{n}ana$ " is less that what is known eg by following "mind- $vi\tilde{n}\tilde{n}ana$ " performing the function of "determining." The first is visual awareness which discerns the presence of a visual object, and also discerns its basic components, labelled by accompanying $sa\tilde{n}\tilde{n}a$. The second is discernment operating at a more abstract level, in unison with accompanying $sa\tilde{n}\tilde{n}a$ labelling the aspects so made out. (Harvey 1996:95)

<u>5.1.2 Modes of mind</u>. According to the Theravāda Abhidhamma, there are, in terms of function, two basic modes of the mind or consciousness: the process mind or process consciousness ($v\bar{t}thi,citta$) and the process-free mind ($v\bar{t}thi,mutta$). The function of **the process mind** ($v\bar{t}thi,citta$) is called $v\bar{t}thi,citta$, or the consciousness process ($vi\tilde{n}n\bar{a}na,kicca$), or simply "the conscious process." This is the mind that is actively perceiving sense-objects and reacting to them. We shall look at the process-free mind later [6].

5.1.3 Consciousness process

¹²⁰ Damasio, The Feeling of What Happens, 1999:322.

¹²¹ Daniel J Boorstin, *The Discoverers: A History of Man's Search to Know His World and Himself.* New York: Vintage Books, 1985:xv.

¹²² Cited in K C Cole, *The Hole in the Universe*, 2001:235.

¹²³ For a simple but instructive summary, see Gethin 1998:215-218.

5.1.3.1 The Abhidhamma Commentaries and the Visuddhi,magga (Vism 14) mention the following 14 functions in the consciousness process, namely, (1) rebirth-linking (*paṭisandhi*), (2) the life-continuum or "the subconscious" (*bhav 'aṅga*), (3) adverting (*āvajjana*), (4) hearing, (5) seeing, (6) smelling, (7) tasting, (8) bodily sensing (touch), (9) receiving (*sampaṭicchana*), (10) investigating (*santīrana*), (11) determining (*votthapana*), (12) impulsion (*javana*), (13) registering (*tad-ārammaṇa*), and (14) dying (*cuti*).

<u>5.1.3.2</u> The Visuddhi,magga gives this example of the conscious process, which we will examine at in the main section below. If the sense-object is weak, it merely reaches the stage of "impulsion" (*java-na*), or of "determining" (*voṭṭhapana*). If it is very weak, then only a disturbance of the life-continuum occurs.

<u>The process of mind-consciousness</u> itself, that is, without the involvement of the five physical senses, occurs thus: if the mind-object entering the mind-door is distinct, then it passes through the stages of "advertence at the mind door" (*mano,dvārâvajjana*), the impulse stage and the registering stage, before finally sinking into the life-continuum stream.

THE COGNITIVE PROCESS

(Vism 14.115-124/458-460) Slightly abridged & paraphrased¹²⁶

- 115 ...when a visible object comes within the eye's range, there is impinging upon the eye-sense (cakkhu,pasāda) due to the visible object. Thereupon, due to the power of the impingement, there is a vibration [disturbance] (calana) in the life-continuum. Then, when the life-continuum ceases, the functional mind-element (kiriya,mano,dhātu) arises making same visible object (ārammaṇa), as if cutting off the life-continuum, and accomplishing the function of adverting (āvajjana). So, too, in the case of the ear, and so on.
- 116 When any one of the six kinds of objects comes within the range of the mind door, then, after the vibrating of the life-continuum, the functional mind-consciousness-element without root-cause¹²⁷ arises accompanied by equanimity, as if cutting off the life-continuum, and accomplishing the function of adverting.

This is how the occurrence of the two kinds of functional consciousness should be understood as adverting.

117 Then, after the adverting at the eye-door, <u>eye-consciousness</u> arises, accomplishing the function of seeing in the eye-door and having the eye-sense as its physical basis. Likewise,

after the adverting at the ear-door, ear-consciousness arises,...

after the adverting at the nose-door, nose-consciousness arises,...

after the adverting at the tongue-door, tongue-consciousness arises,...and

after the adverting at the body-door, <u>body-consciousness</u> arises, accomplishing the function of <u>feeling (a touch)</u>¹²⁸ in the body-door and having the body-sense as its physical basis.

These comprise the wholesome resultant (consciousness) with respect to desirable and desire-neutral object-fields, and the unwholesome resultant with respect to the undesirable and desire-neutral object-fields.

¹²⁴ This term is used in a Buddhist sense, not the modern or Freudian sense, both of which however may have certain similarities: see [6]. See also Tao Jiang 2004.

¹²⁵ See *Nimitta and anuvyañjana*, SD 19.14 (2).

¹²⁶ For further details & diagrams, see *Nimitta & anuvyañjana*, SD 19.14.

¹²⁷ "Without root-cause," *ahetuka*, ie without any of the 2 wholesome roots, non-greed (*alobha*), non-hate (*adosa*) and non-delusion (*amoha*).

[&]quot;Feeling," phusana, the amplifier has been added so as not to confuse one with vedanā, "feeling."

This is how the occurrence of the ten kinds of resultant consciousness should be understood as seeing, hearing, smelling, tasting and feeling (a touch).

118 From the words, "Eye-consciousness, having arisen and ceased, so that there next arises consciousness, mind, mentation,...which is the appropriate mind-element..." (Vbh 88), we understand that next after eye-consciousness, etc, and receiving (sampaticchana) the same object-fields as they deal with, the mind-element arises as wholesome resultant next to a wholesome resultant (eye-consciousness, etc), and as [459] unwholesome resultant next to an unwholesome resultant (eye-consciousness, etc).

This is how the occurrence of the two kinds of resultant consciousness should be understood as <u>receiving</u> (*sampaţicchana*).

119 From the words, "A mind-element, having arisen and ceased, too, there next arises consciousness, mind, mentation, ... which is the appropriate mind-consciousness element..." (Vbh 89), we understand that then a resultant mind-consciousness-element without root-cause arises <u>investigating</u> (santīraṇa) the same object-field as that received by the mind-element. When it is next to an unwholesome resultant mind-element, it is unwholesome resultant, and when it is next to a wholesome resultant (mind-element), it is either accompanied by mental pleasure in the case of a desirable object, or accompanied by equanimity in the case of a desire-neutral object.

This is how the occurrence of the three kinds of resultant consciousness should be understood as <u>investigating</u> (*santīrana*).

120 Next after investigating, a functional mind-consciousness-element without root-cause arises accompanied by equanimity <u>determining</u> (*voṭṭhapana*) the same object-field.

This is how the occurrence of one kind of resultant consciousness should be understood as <u>determining</u> (*votthapana*).

121 Next after determining, if the visible object, etc, as object is great (*mahanta*), then six or seven <u>impulsions</u> (*javana*) occur with respect to the object-field as determined. These are among the eight kinds of sense-sphere wholesome, or the twelve kinds of unwholesome, or the nine remaining sense-sphere functional. This, firstly, is the way in the case of the five doors.

But in the case of the mind door, those same impulsions occur next after the mind-door adverting...

122 At the end of the impulsions, if the object is a very great one in the five doors, or is clear in the mind door, then in sense-sphere beings at the end of the sense-sphere impulsions, resultant consciousness occurs through any condition it may have obtained, such as previous karma, impulsion consciousness, etc, with desirable, etc, object. ... [460] ... Though ready to occur with the life-continuum's object after the impulsions have ended, it nevertheless occurs making the impulsion's object its object. Hence it is called registration (tad-ārammana, "having that as its object").

This is how the occurrence of eleven kinds of resultant consciousness should be understood as <u>registration</u> (*tad-ārammaṇa*).

123 At the end of the registration, the life-continuum recurs. When the life-continuum is again interrupted, adverting, etc, occur again, and then the conditions are present, the conscious continuity recurs as adverting, and next after adverting, there is seeing, etc, according to the law of consciousness, ¹²⁹ again and again, until the life-continuum of existence in one is exhausted. For the last life-continuum consciousness of all in one's existence is called <u>death</u> (*cuti*), so called because of the falling from that state

124 And after death, there is rebirth-linking again, and after rebirth-linking, life-continuum. Thus the conscious continuity of beings who wander through states of being, destinations, stations of consciousness, and abodes of beings, recur without a break. But when one attains arhathood here, it ends with the ending of his death-consciousness.

[&]quot;The law of consciousness," *citta,niyāma*. This is one of the 5 natural laws (*niyāma*), ie those of (1) heat (energy) (*utu,niyāma*), (2) seeds (heredity) (*bīja,niyāma*), (3) karma (*kamma,niyāma*), (4) mental processes (*citta,niyā-ma*), and (5) nature (*dhamma,niyāma*) (DA 2:432; DhsA 272): see SD 5.7 (2).

5.2 SUMMARY OF THE CONSCIOUSNESS PROCESS¹³⁰

<u>5.2.1</u> A simple consciousness process involves the functions of perceiving, receiving, and investigating an object, a process said to be performed by classes of <u>rootless resultant consciousness</u> (*vipāka,ahetu-ka,citta*). That is to say, the sense-data that arise at the mind-door have been determined by past karma. Whenever you see, hear, smell, taste or touch something that is desirable (*iṭṭha*) or pleasurable (*sukha*), you experience a result of previous wholesome consciousness. Whenever you see, hear, smell, taste or touch something that is undesirable (*aniṭṭha*) or painful (*sukha*), you experience a result of previous unwholesome consciousness. Such experiences are thus the result of your previous karma and beyond immediate control.

- 5.2.2 However, in each consciousness process, the mind has a choice as to how it will react to the experienced object. It is only in the final stage, when the mind has chosen to enjoy, reject or ignore its object in some way, that unwholesome or wholesome consciousness are activated, and sows the seeds of future fruits. "In this way," remarks Gethin, "the Abhidharma in effect provides an exact small-scale analysis of the process of dependent arising." (1998:216)
- **5.2.3** We have already mentioned *bhavanga* ("existence-factor") as the "life-continuum" or "subconscious" [5.1]. This is the consciousness with which a being is born, and it is the state to which a being's cognitive consciousness [3] "returns" during deep, dreamless sleep, fainting, coma, dhyana, and in between every consciousness process.
- <u>5.2.4</u> It is also the state that arises at the moment of conception, serving as a link (*paṭisandhi*) between one life and the next. Each being's *bhavanga* has unique characteristics, reproducing itself and defining the being. The function of the human *bhavanga* is performed by one of <u>8 general classes of wholesome resultant consciousness</u>. Like the mind-door consciousnesses mentioned above [5.2.1], these classes of consciousness are the result of past karma. They are, however, much more complex, having the roots of non-greed (*alobha*), non-hate (*adosa*), and sometimes also wisdom (*amoha*).
- 5.2.5 Human birth is the result of one of these 8 types of consciousness, arising from past wholesome karma, performed many lives ago, but more often it is a wholesome karma done in the last proximate life. The deciding factor is one death-thought moment (*cuti,citta*), but this is only a momentum of preceding mental state, and we have no control over it. At death, significant acts (good or bad) done during our life tend to present themselves to the dying mind. Understandably, there is a common Buddhist belief that wholesome actions done at the time of dying, or the recall of some wholesome actions, is crucial to bring about a good rebirth. ¹³²

6 The subconscious

6.1 The key concept of the mind-process theory is the *bhav'anga*, which literally translates as "existence-factor" but is often rendered as "life-continuum" or "the subconscious." The term "subconscious," however, is a 20th-century psychological term, referring to that part of our mind not usually accessible to the conscious process but powerfully influencing it. As the term is imprecise, some academics choose to use "preconscious," however, as a psychoanalytic term to refer to "knowledge, emotions, images, etc, that are not momentarily consciousness but which are easily accessible." Here, I generally use "uncon-

¹³⁰ See Harvey 1995:155-168; Gethin 1998:216.

¹³¹ According to **Abhidhammattha,saṅgaha**, these *kusala,vipāka-ahetuka,cittāni* are: (1) eye-consciousness accompanied by equanimity, (2) ear-consciousness ..., (3) nose-consciousness ..., (4) tongue-consciousness ..., (5) body-consciousness ..., (6) receiving consciousness accompanied by equanimity, (7) investigating consciousness accompanied by joy, and (8) investigating consciousness accompanied by equanimity. (Abhs:BRS 1.9/41 f)

¹³² For examples of counseling of the dying, see **Dhānañjāni S** (M 97), SD 4.9; **Anātha,piṇḍik'ovāda S** (M 143), SD 23.9; **(Gati) Mahānāma S** (S 55.21/5:369-372), SD 23.1; **Gilayāna S** (S 55.54/4:408-410); **Nakula S** (A 6.16/-3:295-298), SD 5.2; see also **Sāleyyaka S** (M 41), SD 5.26; **Jāṇussoṇī S** (A 10.177/5:269-273), SD 2.6.

¹³³ See Abhs:BRS 3.8/122-124. For a simple and useful summary, see Gethin 1998:215-223.

¹³⁴ A S Reber, *The Penguin Dictionary of Psychology*, 1985. However, see Fig 2.2.

scious" to refer to the latent tendencies (*anusaya*)¹³⁵ and related mental processes. Since, the *bhavanga* often juxtaposes itself to conscious states but is not itself conscious, perhaps the term *subconscious* would serve well to describe it, sometimes even to define it.

- **6.2** The *bhavanga* has been described as "the resting state of consciousness which occurs uninterrupted in dreamless sleep, and which is momentarily reverted to in waking consciousness between each act of processing a sense-object." (Harvey 1996:95). There is an allusion to the *bhavanga* in a passage in **the Mahā Hatthi,padôpama Sutta** (M 28):
 - **27a** ¹³⁶If, friends, internally **the eye** is unimpaired [intact] but no external forms come into its range, and there is no appropriate conscious engagement [appropriate act of attention] (*tajjo samannāhāro hoti*), ¹³⁷ then there is no appearance of that class of consciousness. ¹³⁸
 - **27b** If, friends, internally the eye is unimpaired [intact] and external forms come into its range, but there is no appropriate conscious engagement [attention], then there is no appearance of that class of consciousness.
 - **27c** If, friends, internally the eye is unimpaired [intact] and external forms come into its range, and there is a appropriate conscious engagement, then there is the appearance of that class of consciousness.

 (M 28,27/1:190), SD 6.16

The above passage describes how consciousness ($vi\tilde{n}\tilde{n}\bar{a}na$) and its accompaniments arise when there is an intact sense-organ, an appropriate sense-object within range, and appropriate attention ($samann\bar{a}h\bar{a}ra$). 139

6.3 As already mentioned [5.1], there are **2 basic modes of the mind or consciousness**: the process mind or process consciousness (*vīthi,citta*) and the process-free mind (*vīthi,mutta*). The mind that is process-free (*vīthi,mutta*) (that is, does not arise at any of the sense-doors) is resting in the inactive mode known as **bhav'aṅga**, is, as we have seen, sometimes translated as "the unconscious process" [5]. The **bhavaṅga** is a concept that evolved primarily in the Abhidhamma commentarial tradition to explain the continuity of consciousness and personal identity in the absence of a permanent self (which is denied by the **anattā** doctrine). "Between each active consciousness process the mind returns to a basic state of con-

¹³⁵ See S 36.6,8.2 (SD 5.5) (3 kinds), M 18,8 (7 kinds), SD 5.17, + SD 6.14 (5).

¹³⁶ The **Madhu,piṇḍika S** (M 18) has a similar analysis of the 18 elements (6 sense-organs + 6 sense-objects), beginning with: "Friends, dependent on the eye and forms, eye-consciousness arises. **The meeting of the three is contact.** With contact as condition, there is feeling. What one feels, one perceives. What one perceives, one thinks about. What one thinks about, one mentally proliferates. What a person mentally proliferates is the source through which perceptions and notions due to mental proliferation impacts one regarding past, future and present forms cognizable through the eye." (M 18,16/1:111 f)

¹³⁷ "Appropriate conscious engagement," *tajjo samannāhāro hoti*, or "an appropriate act of attention on the part of the mind" (Jayatilleke, 1963:433). *Tajjo* (*tad* + *ya*), "this like," appropriate; "engagement [of attention]" (*samannā-hāra*) here is syn with *manasikāra*, "attention" (M 1:445; Vbh 321). Comy explains it here as attention arising in dependence on the eye and forms. It is identified with the "five-door adverting consciousness" (*pañca,dvāra,vajja-na,citta*), which breaks off the flow of the life continuum (*bhavanga*) to initiate the process of cognition (MA 2:-229). Even when a sense-object (external stimulus) comes within the range of the sense-organ, if attention is not directed towards the object (because one is occupied with something else), there is still no appearance of "the corresponding class of consciousness." Here [27a], meaning that no eye-consciousness would arise. See Harvey 1996: 95.

^{138 &}quot;Class of consciousness," viññāṇa,bhāga. Comy: This section introduces form derived from the 4 great elements. Derived form, according to the Abhidhamma analysis of matter, includes the 5 sense-faculties (pasāda,rūpa) and the first 4 kinds of sense-object, the tangible object being identified with the primary elements themselves (MA 2:229). This passage is qu at Kvu 620; cf Miln 56 ff. **Peter Harvey** renders viññāṇa,bhāga literally as "share of discernment [consciousness]" (1995:129-133), where he also argues against **N Ross Reat**'s rendition of it as "type of consciousness" (1987:19) and **R E A Johansson**'s interpretation of the dependence of rūpa on consciousness (1979: 32).

<sup>32).

&</sup>lt;sup>139</sup> **Harvey** says that this is in fact a reference to the *bhavanga* as "a mind ready-to-act (though it is replaced by the more active *cittas* which follow it in the 'process of *cittas*')." (1996:95).

sciousness (*bhavanga*) that defines a being as an individual before emerging once more in response to some physical or mental stimulus." (Gethin 1998:22)

6.4 The life-continuum thus flows on like a stream (*sota*) (or waves)¹⁴⁰ from one existence to the next; as such, it is called *bhavanga*, *sota* (the life-continuum stream). More commonly, however, it is called *bhavanga*, *citta* (existence-factor consciousness), and is the foundation of all experiences, both conscious and unconscious.

It retains the traces of all impression and sensations, and makes it possible to have recollections of these in the form of memories. At the beginning and end of each individual existence it is known as "rebirth-linking consciousness" (*paṭisandhi*) and "death consciousness" (*cuti,citta*) respectively. The concept of the *bhavanga* paved the way for later idealist trends and the evolution of the notion of the *ālaya,vijñāna* or "storehouse of consciousness."

(Oxford Dictionary of Buddhism, ed Damien Keown, 2003)

6.5 An important problem that the *bhavanga* concept tries to solve is a **moral** one: <u>if there is no self, how are we responsible for our actions?</u> It provides some sort of "identity" in its continuity. Thus, instead of attributing the continuity of character traits and habitual tendencies to an "individual" (*pudgala*), as the Pudgala, vādins did, ¹⁴¹ or to a continuously present (but always changing) underlying state of mind, which the Sautrāntikas and later the Yogâcārins tended to do, the Theravādins refer to a continually intervening state of mind (that is, as waves of consciousness). ¹⁴²

7 How to really know the mind

7.1 THE TRUE NATURE OF CONSCIOUSNESS

- **7.1.1** From our discussion so far, we have the idea that the mind (*citta*) evidently "rules all conscious activity." To date, even as far as science goes, it has no really effective way of measuring consciousness. However, we do have various machines and methods of measuring what the brain does, have but nowhere in the Buddha texts is the mind ever equated with the brain or located in the brain. Buddhism certainly does *not* define the mind as "the activity of the brain." In other words, the brain is not the mind, but is, at best, a sort of circuit-board, through which some more physical aspects of consciousness operate. 145
- <u>7.1.2</u> According to **the Ānâpāna,sati Sutta** (M 118), in preparing for <u>the breath meditation</u>, we should first find a suitable place and sit in a comfortable posture so that we can keep our mind focused. In the *first* set of 4 aspects (the contemplation of the body, $k\bar{a}y\hat{a}nupassan\bar{a}$), we simply directs our attention to the breathing process so that it becomes calm and focused. In the *second* set of 4 aspects (the contemplation of feelings, $vedan\bar{a}'nupassan\bar{a}$), we enter into dhyana.
- 7.1.3 Only when we have reached the ninth stage of the 26 steps of the breath meditation, a stage known as *citta,paṭisamvedī* (experiencing the mind) [Table 7.1], that we can truly say that we <u>know the mind</u>. That is, after emerging from dhyana, with a powerfully focused mind, we can then really experience the true nature of the mind. Only through such deep introspection, we notice that whatever we experience is often followed by a different type of experience, as illustrated in the fruit salad parable. ¹⁴⁶ Because these "units" of experiences—of seeing, hearing, smelling, tasting, touching, and thinking—immediately follow one another, it gives one an illusion of sameness and continuity, even a sense of permanence.

¹⁴⁰ On <u>consciousness</u> as waves and particles, see *Viññāṇa*, SD 17.8a (3.2.2).

¹⁴¹ On Pudgala, vāda, see **Bhāra S** (S 22.22/3:25 f), SD 17.14.

¹⁴² See Gethin 1994.

¹⁴³ Brahmavamso 2006:202 f.

¹⁴⁴ See eg MRI, fMRI and PET at §1.3 nn.

On the "location" of the mind, see **The body in Buddhism**, SD 29.6a (3.3).

¹⁴⁶ See SD 17.8a (4.3).

7.1.4 However, with deep introspection or mindfulness, we will know that mind-consciousness is always following behind each sense-experience. When we see this, we then see through the illusion of sameness and continuity of consciousness. Consciousness then is like a sandy beach that looks continuous and compact, but on closer examination, we discover that it is really made up of discrete particles of sand. In fact, under magnification, we would notice that there are spaces around each of the sand-particles, so that they appear to float as single particles in a universe of sand. Nothing, in other words, runs through these grains of sand.

7.1.5 It is the same with water in a lake or a stream: it looks like there is a unified body or continuous flow. However, when we look at the water molecules in an electron microscope, there is nothing but only space separating them. And not only that, if we observe closely enough, we see that they are all in constant and rapid motion. In the same way, one consciousness arises and then another disappears, and so on, with nothing in between them.

<u>7.1.6</u> The (Satipaṭṭhāna) Samudaya Sutta (S 47.42) gives a succinct explanation of <u>how consciousness</u> arises and passes away, thus:

The 16 Steps of the Ānāpāna, sati Bhāvanā

(Ānāpāna, sati Sutta, M 118/3:77-88), SD 7.13

Physical preparations [17]

Finding a quiet place

Sitting comfortable

Setting up mindfulness

The 12 steps for getting into dhyana [mental absorption]

[Contemplation of the body] [18]

- Step 1—Experiencing a long breath
- Step 2—Experiencing a short breath
- Step 3—Experiencing the whole breath (or whole body)
- Step 4—Calming the breath

[Contemplation of feelings: Entry into dhyana] [19]

- Step 5—Arousing joy
- Step 6—Arousing happiness
- Step 7—Understanding mental functions
- Step 8—Calming the joy and happiness

[Contemplation of the mind]

- Step 9—Experiencing the mind [20] [where we really know the mind]
- Step 10—Shining the *nimitta* [meditation sign]
- Step 11—Sustaining the *nimitta*
- Step 12—Freeing the mind

[Contemplation of dharmas]

The 4 steps to take after emerging from dhyana [21]

- Step 13—Reflecting on impermanence (anicca)
- Step 14—Reflecting on fading away [of lust] (virāga)
- Step 15—Reflecting on cessation [of suffering] (*nirodha*)
- Step 16—Reflecting on letting go [of defilements] (patinissagga)

Table 7.1 The 16 steps of breath meditation

SD 17.8b(7)

(Satipaṭṭhāna) Samudaya Sutta

The Discourse on the Arising of Satipatthana | **S 47.42**/5:184 S 5.3.5.2 = Samyutta Nikāya 5, Mahā Vagga 3, Satipaṭṭhāna Samyutta 5, Amata Vagga 2 Theme: The arising and passing away of the 4 focuses of mindfulness

- 2 Bhikshus, I will teach you **the arising and the passing away of the 4 focuses of mindfulness**. ¹⁴⁷ Listen to it.
 - 3 And what, bhikshus, is the arising of the body? With the arising of food (āhāra), 148 With the ending of food,
 - 4 With the arising of contact (*phassa*), 150 With the ending of contact,
 - 5 With the arising of name-and-form $(n\bar{a}ma, r\bar{u}pa)$, 151 With the ending of name-and-form,
 - 6 With the arising of attention (*manasikāra*), With the ending of attention,

there is the *arising* of the body $(k\bar{a}ya)$. there is the *ending* of the body. there is the *arising* of feeling $(vedan\bar{a})$. there is the *ending* of feeling. there is the *arising* of mind (citta). there is the *ending* of mind.

there is the *arising* of <u>phenomena</u> (*dhamma*). there is the *ending* of phenomena. 153

— evam —

The (Satipaṭṭhāna) Samudaya Sutta explains that the body is dependent on material food (kabalinkār'-āhāra), and also on contact (phass'āhāra), giving rise to feeling. Then, dependent on name-and-form, there is mind (citta), here referring to consciousness (viññāṇa), more specifically, cognitive consciousness. While attention is the rudimentary cognitive process, it here refers to a volitional process of directing our mind in identifying phenomena. The theme of the teaching is that all these processes are impermanent: they arise and fall away repeatedly. 154

7.2 OUT OF THE FLOODS ONTO SAFE GROUND

7.2.1 The knower is impermanent. We may understand the mind as the "knower," and even regard it as being impermanent, and be reborn in dhyanic form realms. However, as long as we have not let go of the craving for existence (*bhava*), we would be reborn into the sense-world (which includes the subhuman planes) again, and face suffering all over again. This is because we still takes the "knower" to be the self.

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¹⁴⁷ Here, *satipaṭṭhāna* clearly refers to the *objects* of mindfulness. On the practice, see **Satipaṭṭhāna Ss** (D 22; M 10), SD 13.

¹⁴⁸ The 4 kinds of <u>food</u> are: (1) material (edible) food (*kabalinkār'āhāra*), (2) contact (*phass'āhāra*), (3) volition (*mano,sañcetan'āhāra*), (4) consciousness (*viññāṇ'āhāra*) (D 3:228; M 1:48, 1:261; S 2:13, 48, 98-105; Vbh 401). See **Mahā Taṇhā,saṅkhāya S** (M 38.9-16/1:261), SD 7.10 & **Āhāra S** (S 46.51/5:102-107), SD 7.15.

¹⁴⁹ On the body, see **Dīgha,nākha S** (M 74,9/1:500), SD 16.1. On the arising of the body (*kāya*), see **Mahā Taṇhā,saṅkhāya S** (M 38,26-29/1:261), SD 7.10.

¹⁵⁰ On <u>contact</u>, see *Vedanā*, SD 17.3(3).

¹⁵¹ On name-and-form ($n\bar{a}ma, r\bar{u}pa$), see (Paţicca,samuppāda) Vibhaṅga S (S 12.2,12), SD 5.15 n + SD 5.17 (3).

Here, *citta* is syn with $vi\tilde{n}\tilde{n}ana$ (consciousness), with $n\bar{a}ma,r\bar{u}pa$ as its condition, and the condition for the preceding, $vedan\bar{a}$ (feeling), too. *Citta* always arises based on $r\bar{u}pa$ (form), and in conjunction with contact, feeling, perception, volition, and attention (all constituents of $n\bar{a}ma$). In modern terms, this is "cognitive consciousness": see Nagara S (S 12.65), SD 14.2 (2) & $Vi\tilde{n}\tilde{n}\tilde{a}na$, SD 17.8a (6).

¹⁵³ *Manasikāra,samudayā dhammānam samudayā*. Comy says that the phenomena of the awakening factors arise through wise attention; the phenomena of the hindrances, through unwise attention; but all phenomena arise from contact. (SA 3:229)

¹⁵⁴ For a historical critical study of (Satipaṭṭḥāna) Samudaya S, see Sujato 2005: 203-208.

¹⁵⁵ On the gods falling straight into the hells, see (Nānā,karaṇa) Puggala S 1 (A 4.123), SD 23.8a.

Only through deep introspection, either through mindfulness practice (such as the perception of impermanence) or after a dhyanic experience, we would be able to clearly see that the "knower" as constantly arising and passing away, and, as such, it is not the self. This insight comes when we have learned to fully let go of the 5 physical senses and keep to just the sixth sense, the mind, in our meditation. In the mind's profound stillness, away from the distractions of physical sense-objects, we can see that consciousness is just a series of discrete granular or fragmentary particle of events.

7.2.2 True renunciation. The purpose of Buddhist mind-training is to learn to gradually let go of more and more consciousness. First, we let go of the distractions from the sense-doors; then we close the 5 physical sense-doors themselves (through samadhi). Then, directly experiencing the mind through dhyana, we allow mind-consciousness to cease. This is the true meaning of renunciation, the inner lettinggo.

Brahmavamso explains this important process thus:

The whole purpose of these jhānas is to learn through practice, bit by bit, to let go of more and more consciousness. It's like slicing away at mind consciousness. Allowing consciousness to cease, by calming it, settling it, and allowing it to go to cessation. Then the consciousness completely ceases for long periods of time in what's called *nirodha-samapatti* (the attainment of cessation). This is the cessation of all that is felt and all that's perceived (*sañña-vedayita-nirodha*). Any person who experiences this attainment, they say, will be an arahant or an anagami afterwards. Why? Because they've seen the end of consciousness, they've touched that as an experience.

(Brahmavamso 2001:5, digital ed)

Consider this parable, A tadpole in the water might not know dry land. As it grows into a frog and leaves the water for the first time, it still has some water on its back. It is wet and slimy but it now knows dry land, and so is free of the water.

7.2.3 Being conscious of the unconscious

- 7.2.3.1 The Buddha or an arhat, being fully awakened beings, fully understand their minds, and, as such, have raised the unconscious from its dark depths into the bright conscious level. Once it is seen in the light of wisdon, that darkness is routed—there is no more unconscious, no more latent tendencies [***], no more new karma to chain us to a worldly cycle of ignorance and craving.
- 7.2.3.2 In meditation, too, with some level of samadhi or mental stillness—even without dhyana—with some mental calm and clarity, we would be able to become conscious of at least some aspects or levels of our unconscious. And to the extent that we see this hidden darkness, we dissolve it away in the light of mindfulness.
- 7.2.3.3 Spiritual counselling by an experienced therapist, too, can help us raise the unconscious to a conscious level. To do this effectively, we need the calm and clarity of breath meditation. To expedite this healing awareness, we need the joy of lovingkingness, so that we accept ourself fully and unconditionally. With this mindfulness and mental joy, we trutly and spiritually grow as an individual.
- 7.2.3.4 The darkness that is the unconscious hides or blurs self-knowledge. The unconscious is fed and flourishes so long as we cannot or will not see it. We are blinded by its darkness. So long as we are not conscious of the unconscious, it will direct our life, and we will call it fate, luck or faith.

Awakening is liberating self-knowledge—the mind and heart fully disclosing themselves so that we truly know ourself. Then, it is does not matter at all what others think we are. We would not be thinking about what we are. We know what we really are: we have joyfully awakened from the darkness of the unconscious.

Bibliography

[For other titles, see SD 17.1, Biblio.]

Blackmore, Susan

2003 Consciousness: An Introduction. London: Hodder & Stoughton, 2003 pb ISBN:

0340809094. New York: Oxford University Press, 2004. hb ISBN 0195153421 pb ISBN

019515343X

 $2004 \rightarrow 2003.$

Burton, David

2005 "Unconscious beliefs in Buddhist philosophy: A comparative perspective," Contempora-

ry Buddhism 6,2 Nov 2005: 117-130

Cole, KC

The Hole in the Universe: How Scientists Peered over the Edge of Emptiness and Found

Everything. New York: Harcourt, 2001

Damasio, Antonio

1999 The Feeling of What Happens: Body and Emotion in the Making of Consciousness. New

York: Harcourt, 1999

Dehaene, S, & L Naccache

2001 "Towards a cognitive neuroscience of consciousness: basic evidence and a workspace

framework." Cognition 79,1-2 2001:1-37.

Dennett, Daniel

1991 Consciousness Explained. Boston, MA, & London: Little, Brown & Co, 1991.

de Silva, M W Padmasiri

1992 Buddhist and Freudian Psychology, 3rd ed [1st ed 1073, 2nd ed 1978], Singapore: Singa-

pore University Press, 1992.

Genz, Henning

1999 *Nothingness: The Science of Empty Space*, tr Karin Heusch. Cambridge, MA: Perseus

Books, 1999.

Gethin, Rupert

"Bhavanga and rebirth according to the Abhidhamma." The Buddhist Forum 3, In The

Buddhist Forum, vol. 3 1991-1993 (Papers in honour and appreciation of Professor David Seyfort Ruegg's contribution to Indological, Buddhist and Tibetan Studies), ed Tadeusz Skorupski & Ulrich Pagel. London, School of Oriental and African Studies, 1994:11-35.

2005 "On the nature of *dhammas:* A review article." [Bk rev of Noa Ronkin, *Early Buddhist*

Metaphysics: The making of a philosophical tradition, 2005.] Buddhist Studies Review 22

2005:175-194.

Hamilton, Sue [Susan]

1996a *Identity and Experience: The constitution of the human being according to early*

Buddhism. London: Luzac Oriental, 1996. pp xxxi 218. Rev by Damien Keown

1997.

Hansen, Irvin A

2007 "Buddhist influences on the idea of the unconscious," *Psychological Perspectives* 50,2

July 2007: 181-197. doi: 10.1080/003329270701681551.

http://www.informaworld.com/index/788339546.pdf.

Harvey, Peter

1995 The Selfless Mind: Personality, consciousness and nirvana in early Buddhism. Rich-

mond: Curzon Press, 1995.

1996 Review of The Five Aggregates: Understanding Theravada Psychology and Soteriology by

Mathieu Boisvert [Canadian Corporation for Studies in Religion. Waterloo, Ontario: Wil-

frid Laurier Press, 1995]. Journal of Buddhist Ethics 3 1996:91-97.

Hoagland, Mahlon; & Bert Dobson

The Way Life Works: The Science Lover's Illustrated Guide to How Life Grows, Develops, Reproduces, and Gets Along. NY: Times (Random House), 1995.

James, William

1890 *Principles of Psychology.* [1890, 2 vols] Repr Cambridge, MA: Harvard University Press, 1981. Accessible from http://psycholassics.yorku.ca/James/Principles/index.htm.

Johansson, Rune EA

"Citta, mano, viññāṇa—a psychosemantic investigation." University of Ceylon Review 23.1-2 1965:165-215.

1979 The Dynamic Psychology of Buddhism, London: Curzon, 1979.

King, Richard

"Vijñapti,matratā and the Abhidharma context of early Yogācāra." *Asian Philosophy* 8,1 Mar 1998:5-18. Accessed 26 Oct 2006, http://ccbs.ntu.edu.tw/FULLTEXT/JR-ADM/richard.htm.

Llinas, R; U Ribary, D Contreras & C Pedroarena

"The neuronal basis for consciousness." *Philosophical Transactions of the Royal Society of London*—Series B: Biological Sciences, 353,1377 1998:1841-1849.

Lutz, Antoine; John D Dunne & Richard J Davidson

"Meditation and the neuroscience of consciousness." In *Cambridge Handbook of Consciousness*, ed P Zelazo, M Moscovitch & E Thompson. Cambridge: Cambridge University Press, Apr 2007. hb ISBN-13: 9780521857437 | ISBN-10: 0521857430; pbk ISBN-13: 9780521674126 | ISBN-10: 0521674123. DOI: 10.2277/0521674123. Accessed Sep 2006 from http://brainimaging.waisman.wisc.edu/~lutz/Meditation_Neuroscience 2005 AL JDD RJD 2.pdf.

Olson, Robert F

"Candrakīrti's critique of Vijñāṇavāda." *Philosophy East and West* 24,4 1977:405-411. http://ccbs.ntu.edu.tw/FULLTEXT/JR-PHIL/ew26114.htm.

Rahula, Walpola 1978 2

Zen and the Taming of the Bull: Towards the definition of Buddhist thought. London: Gordon Fraser, 1978. See esp "Ālayavijñāna (Store Consciousness)" 1978:97-99,140 f. Access from http://www.buddhistinformation.com/alaya_vijnana.htm.

Ronkin, Noa

2005 Early Buddhist Metaphysics: The making of a philosophical tradition. London & NY: RoutledgeCurzon, 2005. xii 279 pp. Bk rev by Rupert Gethin 2005.

Singer, W

"Neuronal synchrony: a versatile code for the definition of relations?" *Neuron* 24,1 1999: 49-65, 111-125.

Sujato Bhikkhu

2004b *A History of Mindfulness* [Rev ed of "GIST: The hidden structure of the Buddha's Teachings" & "A history of mindfulness."] Unexpurgated draft. 2004. 242 pp.

2005 A History of Mindfulness: How insight worsted tranquility in the Satipaṭṭhāna Sutta. [Taipei: Corporate Body of the Buddha Educational Foundation] Bundanoon: Santi Forest Monastery, 2005:201-203. Download an edition from http://santifm1.0.googlepages.com/webmind.pdf.

Tao Jiang

"Storehouse consciousness and the unconscious: A comparative study of Xuan Zang and Freud on the subliminal mind." *Journal of the American Academy of Religion* 72,1 Mar 2004:119-139.

Tononi, G; & G M Edelman

"Consciousness and complexity." *Science*, 282,5395 1998:1846-1851.

Velmans, Max¹⁵⁶

"Is human information processing conscious?" *Behavioral and Brain Science* 14 1991: 651-726. http://cogprints.org/593/00/199802003.html.

"When perception becomes conscious." *British Journal of Psychology* 90(4), 1999: 543-566. http://cogprints.org/838/00/BJP2web.html.

Waldron, William S

"How innovative is the *ālayavijñāna*?: The *ālayavijñāna* in the context of canonical and Abhidharma *vijñāna* theory." *Journal of Indian Philosophy* 22,3 Sep 1994:199-258 & 23,1 Mar 1995:9-51. Accessed 16 May 2007 from http://www.gampoabbey.org/translations2/Innovative-alayavijnana.pdf.

2002 "The dependent arising of a cognitive unconscious in Buddhism and science." *Contemporary Buddhism* 3,2 Nov 2002:141-160.

2003 The Buddhist Unconscious: The ālaya-vijñāna in the context of Indian Buddhist thought. London & NY: RoutledgeCurzon, 2003, esp Intro & ch 1 (1-45).

"The co-arising of self and object, world, and society: Buddhist and scientific approaches." Nova Scotia, Canada: Gampo Abbey, 2004. Published in *Buddhist Thought and Applied Psychological Research: Transcending the boundaries*, (eds) DK Nauriyal, Michael S Drummond, YB Lal. London: Routledge, 2006. http://www.gampoabbey.org/translations-2/Co-arising%20of%20SOWS-Waldron.pdf.

Wallace, B Alan

1998 The Bridge of Quiescence: Experiencing Tibetan Buddhist Meditation. Chicago: Open Court. 1998.

"The Buddhist Tradition of *Śamatha*: Methods for refining and examining consciousness." *Journal of Consciousness Studies* 6,2-3 1999:175-187. Accessed 28 May 2007 from http://www.alanwallace.org/Wallace-Samatha.pdf.

2001a "Intersubjectivity in Indo-Tibetan Buddhism." *Journal of Consciousness Studies* 8,5-7 2001:209-230. Accessed 28 May 2007 http://www.alanwallace.org/intersubjectivity.pdf.

"The potential of emptiness: Vacuum states of space and consciousness." *Network: The Scientific and Medical Network Review* 77, Dec 2001:21-25. Accessed 28 May 2007 from http://www.alanwallace.org/The% 20Potential% 20of% 20Emptiness.pdf.

2001 = 2006a (qv)

"Vacuum states of consciousness: A Tibetan Buddhist view." Ed Lynn Quirolo. [Conference paper at "Nothing in Common: Scientific and Contemplative Views on Nothing," University of California, Santa Barbara, 12 May 2001.] In D K Nauriyal (ed), Buddhist Thought and Applied Psychology: Transcending the boundaries. London: Routledge-Curzon, 2006. Download from: http://alanwallace.org/Vacuum%20States%20Essay.pdf.

2006b "Buddha on the brain." [Interview by Steve Paulson, 27 Nov 2006.] San Francisco, NY & Washington: Salon.com Books. http://www.salon.com/books/int/2006/11/27/wallace/.

Whitaker, Justin

2004 "The Buddhist philosophy of mind." Buddhist Psychology essay (Rel Studies 495), Alan Sponberg, University of Montana, 2004. Access from http://www.mtfreethinkers.org/essays stories/philosophy/Buddhist philosophy of mind. html.

Whyte, Lancelot Law

1960 The Unconscious Before Freud. NY: Basic, 1960, Pbk 1962.

"Unconscious," in (ed) Donald M Borchert, *Encyclopedia of Philosophy*, 2nd ed, Farmington Hills, MI: Thomson Gale (Macmillan Reference), 1967:570-575.

Wijesekera, O H de A

¹⁵⁶ Dept of Psychology, Goldsmiths, University of London, New Cross, London SE14 6NW; email <u>m.velmans-@gold.ac.uk</u>.

"The concept of *Viññāṇa* in Theravāda Buddhism." In *Journal of the American Oriental Society* 84,3 Jul-Sep 1964:254-259.

 $050916\ 061218\ 070612\ 081230\ 091104\ 101111\ 110705\ 121221\ 130509\ 130912\ 151109\ 160722$